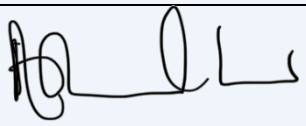
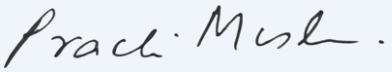
Expert Group Report on Comprehensive Updation of Consumer Price Index

January, 2026

Price Statistics Division
National Statistics Office
Ministry of Statistics & Programme Implementation
Government of India

About Expert Group

Name & Designation	Signature
Shri Ashish Kumar -Chairperson Former Director General (CSO) & Former Director United Nations Statistical Institute for Asia & Pacific (UNSIAP)	
Dr. Himanshu – Member Professor, Centre for Economic Studies & Planning, School of Social Sciences, Jawaharlal Nehru University	
Dr. Prachi Mishra – Member Professor, Department of Economics Director & Head, Ashoka Issac Centre for Public Policy, Ashoka University	
Prof. Sanket Mohapatra – Member Chairperson, Misra Centre for Financial Markets and Economy Indian Institute of Management Ahmedabad	
Shri Anujit Mitra - Member Adviser-in-Charge, Department of Statistics & Information Management (DSIM) Reserve Bank of India	
Dr. (Ms.) Anupam Prakash - Member Adviser-in-Charge, Monetary Policy Department (MPD) Reserve Bank of India	

Director General (Labour Bureau) - Member Ministry of Labour & Employment Government of India	(S.S. NEGI)
Additional Director General - Member Price Statistics Division Ministry of Statistics & Programme Implementation, Government of India	Sanjay (SANJAY)
Additional Director General- Member Household Survey Division Ministry of Statistics & Programme Implementation, Government of India	
Deputy Director General - Member Department for Promotion of Industries and Internal Trade Ministry of Commerce Government of India	DILIP KUMAR SINHA
Deputy Director General - Member National Accounts Division Ministry of Statistics & Programme Implementation, Government of India	RAJESH KUMAR SHARMA
Deputy Director General - Member Secretary Price Statistics Division Ministry of Statistics & Programme Implementation, Government of India	Deepti (DEEPTI SRIVASTAVA)

Abbreviations

AM	-	Arithmetic Mean
CAPI	-	Computer Assisted Personal Interviewing Method
CES	-	Consumer Expenditure Survey
COICOP	-	Classification of Individual Consumption According to Purpose
CPI	-	Consumer Price Index
CPI(AL/RL)	-	Consumer Price Index for Agricultural Labourers and Rural Labourers
CPI(IW)	-	Consumer Price Index for Industrial Workers
DGCA	-	Directorate General of Civil Aviation
EG	-	Expert Group
GM	-	Geometric Mean
HCES	-	Household Consumption Expenditure Survey
IMF	-	International Monetary Fund
MMRP	-	Mixed Modified Reference Period
MoSPI	-	Ministry of Statistics and Programme Implementation
NSS	-	National Sample Survey
PDS	-	Public Distribution System
PPAC	-	Petroleum Planning and Analysis Cell
PSD	-	Price Statistics Division
RBI	-	Reserve Bank of India
UNSC	-	United Nations Statistical Commission

Index

Chapter	Content	Page no.
1	Introduction and Process adopted for Base revision exercise	1- 6
2	Highlights of Enhancements and Modifications in CPI 2024 *vis-à-vis* CPI 2012	7-12
3	Summary of Recommendations	13-16
4	Detailed Recommendations of the Expert Group 1. Adoption of COICOP 2018 2. Item Basket and weights 3. Sample Selection 4. Market Survey 5. Base Price Collection 6. Index Compilation Methodology a. Elementary indices b. Higher level indices c. Compilation of Indices for weighted and Priced Items d. Treatment of Missing Items e. Regular Quality Adjustment in CPI 2024 f. Practical Examples of Index Compilation g. Treatment of Free Items in New CPI Series h. Housing Index i. PDS j. Rail Fare Index k. Postage, Courier and Money Order l. Online Media Provider/ Streaming Services m. Electricity Index n. Telecom Index o. Petrol, Diesel, LPG, CNG and PNG 7. Data Dissemination and Communication	17-79

5	Annexures Annexure 5.1: Number of weighted items (State and sector wise) Annexure 5.2: CPI 2024 structure as per COICOP 2018 Annexure 5.3: Weights (All India, State, Sector, Division, Group and Item wise) Annexure 5.4: Discussion paper on treatment of free PDS items in CPI Annexure 5.5: Discussion paper on the proposed changes in the Housing index compilation methodology. Annexure 5.6: Minutes of the meeting	80 -252

Chapter 1

Introduction and Process adopted for Base Revision

The Consumer Price Index (CPI) is a measure of movement of prices in the items consumed by the Households. The retail inflation based on CPI which provides year on year changes in CPI is a key macro-economic indicator for measuring the health of any economy. Across the world, CPI is considered a very well evolved indicator in terms of its concepts, definitions, methodology and usage.

1.2 To address the requirement of a holistic Consumer Price Index for representing India's rural and urban population, the CPI for rural, urban and combined sector was introduced by the Ministry of Statistics & Programme Implementation (MoSPI) in January, 2011. The item basket and weights were determined on the basis of the 61st round of Consumer Expenditure Survey, 2004-05.

1.3 In view of the availability of the results of NSS 68th round of Consumer Expenditure Survey (CES), the first base revision of CPI took place during 2012 – 2014 under the guidance of a Group constituted by Technical Advisory Committee (TAC) on Statistics of Prices & Cost of Living (SPCL). The Group was chaired by Shri Vishnu Kumar, Former-Director General & CEO, National Sample Survey Office, MoSPI. The revised CPI series with base 2012=100 was launched in January, 2015 with the release of index from January, 2013 and inflation from January, 2014. Following were some of the key improvements introduced during the first base revision exercise of CPI.

a. Weighting diagram was prepared using the results of the Mixed Modified Reference Period (MMRP) data of the NSS 68th Round of Consumer Expenditure Survey (2011-12) as it was consistent with international practices of shorter reference periods for most of the food items and larger reference periods for items of infrequent consumption/purchase; and the then Planning Commission had also opined to use

MMRP data in future for estimating poverty lines at national and sub-national levels as CPI numbers were used in estimation of poverty line.

b. Classification of Individual Consumption According to Purpose (COICOP) 1999 was adopted with certain deviations.

c. For compilation of elementary indices, Geometric Mean (GM) was incorporated in the methodology in place of Arithmetic Mean (AM). The rationale for replacing AM with GM was that GM was more stable and robust against extreme values and the average of the Price Relatives with respect to Base Prices and Ratio of the Averages of Prices with respect to Base Prices coincide in the GM.

d. The sample size of rented dwelling was doubled to address the issue of causality as also to improve the quality of indices, especially in small States/Union Territories (UT). The Group also recommended that in the next round of CES, NSSO may be advised to collect the imputed rent of self-occupied dwellings in rural area.

e. All India item-wise CPI (Combined) of all items was released in public domain.

1.4 In May 2016, the Reserve Bank of India formally adopted "Flexible Inflation Targeting", using this CPI, under the amended RBI Act 1934 with the objective of maintaining price stability while keeping in mind the objective of growth. It not only enhanced the importance and role of this index in policy and economic decision making but also kept this index under the watch of banking and financial institutions.

1.5 The CPI manual, compiled by the International Monetary Fund (IMF) in collaboration with International Labour Organisation (ILO), Statistical Office of the European Union (Eurostat), United Nations Economic Commission for Europe (UNECE), Organisation for Economic Cooperation and Development (OECD) and the World Bank, prescribes that the weights and basket of CPI should be updated at least once every five years to maintain their relevance and representativeness. The exercise is completely reliant on the Household Consumption Expenditure Surveys (HCES) which are designed to capture spending behaviour and pattern of the households of the country. Therefore, countries conduct detailed HCES regularly for capturing household expenditures especially for

updating their CPIs and National accounts. India conducted the HCES in 2017-18 but due to unforeseen circumstances the results of the survey could not get published. The conduct of next HCES got delayed due to outbreak of the Covid-19 pandemic.

1.6 After the launch of the HCES by National Sample Survey (NSS) in August 2022, Price Statistics Division (PSD) of MoSPI constituted an Expert Group (EG) under the Chairmanship of Former Director General (CSO) and Former Director, United Nations Statistical Institute of Asia Pacific (UNSIAP) in February, 2023. The key terms of reference of this Group were to carry out in-depth exercises and recommend necessary changes on the base updation of CPI.

Since the exercise was initiated after a long gap, it was the need of the hour to comprehensively examine all facets of the Consumer Price Index including selection of sample markets, methodology and dissemination of results. The emergence of efficient technology tools for data collection, scrutiny and compilation necessitated a careful consideration for usage of the same in the new CPI series. Capturing the price trends on the e-commerce platforms also became important because of its growing use by the Indian households. In view of the fast-changing Indian economy, versatile spending behaviour of the households and application of this CPI in monetary policy decisions, the daunting task of providing guidance to MoSPI on the base revision of CPI was entrusted to the Expert Group.

1.7 The Group deliberated on each and every aspect of the CPI during its 13 meetings from April, 2023 to December, 2025. The summary of the topics discussed during these meetings are as follows;

Date	**Key topics of Discussion**
First meeting on 20th April, 2023	Sample design, sample list and list of items for Market Survey, timelines for launching Market Survey, exploring the feasibility of inclusion of collection of prices from e-commerce platforms, use of mobile based or other IT platforms for price data collection

Date	Key topics of Discussion
Second meeting on 2nd May, 2023	Criteria for allocation and selection of villages for CPI 2024 series, options of urban market allocation to different category of towns and criteria for selection of urban markets, mapping of items between Consumer Expenditure Survey (CES) 2011-12 and Household Consumption Expenditure Survey (HCES) 2022-23, issues observed in the CPI2012 series which need to be addressed before launching the Market Survey.
Third meeting on 5th September, 2023	Substitution of selected samples due to issues highlighted by the Field Operations Division (FOD) of NSS during market verification exercise, house rent index including exclusion of employer provided dwellings and source for dwelling type data, exploring online data by adding markets across the towns, development of portals for rural and urban data and mobile application for data collection of new CPI series, process of data collection for online media service provider (OTT), gold/silver jewellery, airfare including international fare and observations received during zonal training of FOD by PSD on price collection for new CPI series.
Fourth meeting on 30th October, 2023	HCES 2022-23 results, rural and urban sample size, fixing varieties for fruits and vegetables, price collection for more varieties of mango, apple, grapes, banana and orange from each market
Fifth meeting on 4th April, 2024	HCES 2022-23 factsheets and results, issues related to data collection of PDS items, airfare routes and period, price collection related to school/college fee, books, doctor consultations and medical services, legal expenses, cinema/theatre, preference of data collection from "hiring agencies" for services like domestic help, cook, attendant, babysitter, driver, sweeper etc., inclusion of rural rented dwellings, slabs for capturing electricity charges
Sixth meeting on 9th August, 2024	Dissemination of State level item indices in public domain, treatment of free PDS item distributed under Pradhan Mantri Grameen Kalyan Anna Yojana (PMGKAY), treatment of missing prices, compilation of electricity index, methodology for core inflation, preparation of weighing diagram.
Seventh meeting on 6th	Criteria for preparation of weighing diagram, weight re-distribution method for treatment of missing prices, price collection from e-commerce websites.

Date	Key topics of Discussion
November, 2024	
Eighth meeting on 30th January, 2025	Integration of alternative data sources, extent of adoption of COICOP 2018, treatment of composite and other items in weighing diagram, weight redistribution or imputation method for missing prices, rail fare, OTT and fuel from online or administrative data sources
Ninth meeting on 27th February, 2025	Preparation of weighing diagram, use of HCES 2023-24 data, compilation of higher-level indices in case of one or more lower-level indices are not available, issue of month over month changes in house rent index, adoption of COICOP 2018, treatment of PDS items in CPI, presentation of RBI on seasonal items' treatment in CPI
Tenth meeting on 14th May, 2025	Preparation of weighing diagram using HCES 2023-24 data, exclusion of illegal items from CPI, imputation of item weights, linking factor for comparison of two series, House rent index compilation methodology, elementary index compilation in CPI using short index formula, imputation of missing prices, compilation of higher-level indices in CPI, treatment of free PDS items in CPI
Eleventh meeting on 14th August 2025	Interaction of EG with IMF Expert Mr. Brian Graf as part of Technical Assistance Mission on Base Revision of CPI, draft recommendations of IMF TA mission on various aspects
Twelfth meeting on 19th December, 2025	COICOP 2018 mapping of HCES items, weighing diagram using HCES 2023-24 after incorporating COICOP mapping, treatment of items sourced from e-commerce platforms, compilation of index for PDS items, methodology for compilation of electricity price index, house rent index, petrol, diesel, LPG, CNG, PNG, rail fare and telecom indices, review of draft trial CPI using the proposed methodology, level of dissemination in new CPI series and draft template of EG report
Thirteenth meeting on 31st December, 2025	Methodology for compilation of index for "telephone charges (landline & mobile)" on the basis of online and administrative data, "Electricity" index compilation without considering free transfer, "Postage, courier, and money order" index based on data from Department of Posts, index compilation for "online media service provider/streaming services" using online data, inclusion of Metro charges in rail fare, international "air fare" charges

1.8 To understand the requirement of the users and to seek feedback from the experts, academicians, banking and financial institutions and other stakeholders, PSD and EG members adopted a consultative approach by participating in panel discussion on CPI during Conference of Central and State Statistical Organisations (CoCSSO) on 13th August, 2024, brainstorming session on treatment of PDS items in CPI held on 20th November, 2024, International conference on inclusion of alternative data sources in CPI held on 5-6th June, 2025, pre-release consultative workshops held on 26th November, 2025 and 23rd December, 2025 in Mumbai and Delhi respectively.

1.9 To discuss the proposed changes in the CPI 2024 and to ensure its alignment as per standard global practices, MoSPI organised a "Technical Assistance Mission" with IMF Expert Mr. Brian Graf. In the four days' sprint, all the aspects including weights, classification system, reference periods, missing prices, variety sample, index calculation, PDS, alternative data sources, linking the old series with the new one, illegal items, airfare, rail fare, jewellery, rent index, rotation of rent sample, core inflation, seasonal adjustment, outreach etc were discussed threadbare. EG members also had a detailed discussion with IMF expert on the 4th day during its 11th meeting.

Chapter 2

Highlights of Enhancements and Modifications in CPI 2024 vis-à-vis CPI 2012

The Advent of technological tools, ever increasing e-commerce trade, disappearing rural-urban boundaries have compelled the appropriate adaptation and redesigning of the retail inflation measurement tool. The Group consciously strived towards making the new series resilient and robust to reflect the reality. Highlights of the changes and modifications in the CPI 2024 in comparison to CPI 2012 are summarised as under;

2.1 Coverage of markets and items:

CPI 2012 – In the existing CPI series, for all items the prices are collected from 1181 rural markets and 1114 urban markets across 310 towns. At the All-India level, prices are collected for 299 items. The number of items in rural and urban sectors are 288 in rural and 281 in urban.

CPI 2024 –

Keeping in view the adequate representativeness and feasibility of data collection, the sample markets in both rural and urban areas are increased considerably in CPI 2024 series. The price data will be collected from 1465 rural markets and 1395 urban markets across 434 towns. Total number of weighted items in this basket will be 358. Among these items, goods will increase from 259 to 308 and services from 40 to 50 items. Further, 12 online markets are also added across 12 towns having more than 25 lakh population to capture price variations of the items on the e-commerce/online platforms.

In view of the growing computation capability due to use of technological tools for data collection and compilation, no item from HCES is excluded from data collection if the item is available in the State. Therefore, there is a significant increase in the State wise number of items in both rural and urban sectors. State wise number of weighted items in both sectors differ and can be seen at **Annexures 5.1.**

Table 2.1: Coverage in CPI 2024

Coverage at All India level

	CPI 2012	**CPI 2024**
Rural markets	1181	1465
Urban markets	1114	1395
Online markets	Nil	12

Coverage at All India level	CPI 2012	CPI 2024
Towns	310	434
Items (weighted)	299	358
Goods	259	308
Services	40	50

2.2 Data Collection process:

CPI 2012 – Price data for all States and Union Territories (UTs), except Mizoram and Lakshadweep, was collected by the field investigators of National Sample Survey (NSS), MoSPI. In Mizoram and Lakshadweep, the monthly price data was assigned to Directorate of Economics & Statistics (DES) of the State Government.

Price data was collected using "pen and paper" and uploaded on rural and urban portals developed by PSD with support from the National Informatics Centre (NIC) team.

CPI 2024 – All price data will be collected by NSS, field investigators, except Lakshadweep. The data collection for CPI 2024 series will continue to be done by DES in Lakshadweep.

For data collection, a tablet-based software application on Computer Assisted Personal Interview (CAPI) system has been developed by PSD with the help of Enterprise Survey Division (EnSD). To ensure improvement in data quality and security, following features are in-built in this application;

a. Real time data validation
b. Capturing geo-spatial location of the shops
c. Data review module for Survey Supervisors
d. Dashboards with updates for all levels of FOD *i.e.* Sub Regional Offices (SRO), Regional Offices (RO), Zonal Offices (ZO), Headquarter (HQ) & also for PSD officials and
e. Both web-based and tablet-based functionalities

2.3 Classification of items:

CPI 2012 – To represent data, items are classified into 23 Sub-groups and 6 Groups in CPI 2012 series. The series was partially aligned with UNSD endorsed classification system *i.e.* Classification of Individual Consumption According to Purpose (COICOP) 1999.

CPI 2024 – The latest classification framework is COICOP 2018. The CPI 2024 series is mostly aligned with COICOP 2018 with 12 Divisions, 43 Groups, 92 Classes and 162 Sub-classes. To ensure mapping of HCES 2023-24 items as per COICOP 2018 classification system, some adjustments have been done by suitably modifying the names of the items. The mapping will ensure the comparability of India's CPI with the CPIs across the world. The complete structure of CPI series as per COICOP 2018 can be seen at **Annexure 5.2.**

2.4 Methodological improvements:

Following key methodological changes are introduced in CPI 2024;

Table 2.2: Key methodological changes in CPI 2024

S. no.	Areas	CPI 2012	CPI 2024
a	**Elementary Index Compilation**	Jevon's method (Long index formula)	Jevon's index (Short index formula)
b	**Missing prices imputation**	Prices are imputed for non-seasonal items for one month only and are done only within states.	Imputation will be done for all the missing items.
		For seasonal items, there is no imputation	Missing prices for seasonal items will also be imputed
		In case of non-availability of prices in a state/sector, the weights are redistributed among other items of the same section	There will be no redistribution of weights in the new series
c	**House rent index compilation**		
	Coverage	Only urban areas	Urban & rural both
		12 dwellings per market*	Urban – 12 dwellings per market* Rural - 6 dwellings per market*
		Employer provided accommodation included	Employer provided accommodation excluded

S. no.	Areas	CPI 2012	CPI 2024
	Methodology	3 methods used to compile the index for different periods	One method - short index and chain index method
	Higher level indices	Weighted Geometric mean of elementary indices	Weighted Arithmetic mean of elementary indices – aligned with other items
	Source for dwelling type weights	Housing Condition Survey -NSS 69th round	Census 2011 as exhaustive data is available
	Release of Housing index	All India and urban	All India, urban and rural

* Based on availability

2.5 Inclusion of Alternative Data Sources:

In CPI 2012, all data is collected from the physical or brick & mortar shops. To improve the quality of data, enhance robustness of CPI and reduce burden on the data collector, price collection mechanism for several items were explored by PSD in collaboration with State Regional Offices (ROs) of FOD, in CPI 2024. Further, it was also noted that as per HCES 2023-24, the share of expenditure, by the households, through online platforms was 4.0% in rural and 10.5% in urban areas. In view of this, 12 online markets are added across the towns having more than 2.5 million population. All items of CPI basket are mapped to the most popular platform available in the town.

Following are the items for which prices will be collected through alternative data sources in CPI 2024;

Table 2.3: Alternative data sources and items

Sr. No.	Items	Point of collection	Source of data
1.	Air fare	State Regional Offices	Online/e-commerce platforms
2.	Online Media Service Provider/Streaming services	PSD	Online using websites of major service providers (Amazon Prime Video, Netflix, Jio Hotstar, SonyLiv YouTube Premium and Zee5)

Sr. No.	Items	Point of collection	Source of data
3.	Telephone charges (landline including broadband)	PSD	Online using websites of major operators (BSNL, Jio, VI and Airtel). Administrative data on share of subscribers is taken from Annual Report 2023-24 of Telecom Regulatory Authority of India (TRAI)
4.	Postage charges & Money order	PSD	Administrative data of Department of Posts
5.	Rail fare	PSD	Administrative data of Ministry of Railways
6.	Petrol, Diesel, LPG, CNG & PNG	PSD	Administrative data from Petroleum Planning and Analysis Cell (PPAC), Ministry of Petroleum & Natural Gas

2.6 Level of data dissemination:

Table 2.4: Data Dissemination in CPI 2024

Level	CPI 2012	CPI 2024
All India	Rural, urban and combined index & year on year inflation	Rural, urban and combined index & year on year inflation
	Rural, urban and combined Food index Inflation	Rural, urban and combined Food index & Inflation
	Rural, urban and combined - Group & Sub-group wise index & inflation	Rural, urban and combined -Division, Group, Class & Sub-class wise index & inflation
	Item index & inflation at combined level	Item index & inflation at rural, urban and combined level
State/UT	Combined Index & Inflation	Rural, urban and combined Index & Inflation

Level	CPI 2012	CPI 2024
	Combined - Group & Sub-group wise index & inflation	Rural, urban and combined -Division, Group, Class & Sub-class wise index & inflation
		Rural, urban and combined Food index & Inflation
		Item index & inflation at rural, urban and combined level

Chapter 3

Summary of Key Recommendations

The Group deliberated on all issues and aspects related to CPI and provided guidance to PSD from time to time. Detailed recommendations are given in subsequent chapters. For the quick understanding of the users and stakeholders, the key recommendations are categorised as under;

3.1 The latest Household Consumption Expenditure Survey (HCES) 2023-24 will be used for determining the item basket and their corresponding weights in CPI 2024 series. Therefore, the "weight reference period" for CPI 2024 will be 2023-24. In cases where expenditure data for 2023–24 is not available, HCES 2022–23 data should be used.

3.2 To ensure base year or "price reference period" as close as possible to the "weight reference period", the base prices are collected from January to December, 2024. Since the base prices are collected in 2024, the index will be kept as 100 for 2024 for the new series. Therefore, **the base year for new series will be 2024=100.**

3.3 To enhance credibility and to ensure global comparability of Indian CPI, the latest structure of Classification of Individual Consumption According to Purpose (COICOP) 2018 will be adopted in the CPI 2024 series. Since HCES was not aligned with this classification structure, necessary grouping or splitting of the items will be done based on available reliable data sources, wherever required. The dissemination of monthly CPI data will also be done accordingly.

3.4 To verify rural and urban samples, identification of markets, shops and mapping of item identification, a *de novo* market survey will be conducted. The principle of selecting the most popular shop or item be consistently applied whenever a replacement or specification change is required, and appropriate instructions be issued to field offices to ensure uniform implementation. The practice of mapping reserve shops in CPI may be discontinued.

3.5 To capture price movements on the e-commerce platforms, 12 online markets will be added in CPI 2024 series. The prices of items will be collected through online/e-commerce platforms on weekly basis.

3.6 To improve quality and reduce data collection burden on the investigators, price collection of electricity will be done by the State Regional Offices of FOD.

3.7 Since prices of rail fare, postal services and fuel (petrol, diesel, LPG, CNG & PNG) are centrally determined, price collection and compilation will be done by PSD. The data will be sourced from the respective Ministries on monthly basis.

3.8 Price collection of telecom services and online media services (OTT) will be done centrally by PSD through the online sources.

3.9 Airfare for the international direct routes are incorporated into the price collection framework in CPI 2024. EG also recommended the price collection to be conducted with respect to advance ticket purchase as 21 days and 60 days for domestic and international travel respectively. Airfare data are to be collected by State Regional Offices from the well-known websites and for the most popular routes as provided by Directorate General of Civil Aviation (DGCA).

3.10 In case of gold and silver jewellery, in line with international practice, the Group recommended to adopt the approach of defining standard jewellery items that are likely to be available consistently in the market, rather than attempting to price customised pieces. Accordingly, prices of basic and simple gold and silver jewellery such as bangles, necklaces, and rings will be collected.

3.11 For compilation of elementary level indices, Jevon's short index formula will be used instead of long index method. This will ensure better quality adjustments and reduce direct dependency on base prices for calculation.

3.12 In case of missing prices, the imputation of prices will be done for compilation of higher-level indices. The weights will not be redistributed within the other items of the same section, as done in the CPI 2012 series.

3.13 Employer provided accommodations will be excluded from the CPI 2024 series. In view of availability of imputed rent share in rural sector, house rent index will be compiled for rural sector also in CPI 2024 series. Methodological changes will be done in house rent index compilation to address anomalies highlighted by the users in CPI 2012 series.

3.14 The electricity charges will be captured for four slabs (100, 200, 300 and 400 units) from the State Regional offices. These charges will be collected for all DISCOMs of the States.

3.15 EG recommended to communicate to Household Survey Division (HSD) for adding a question to the HCES questionnaire to identify the type of outlet where expenditure was made (online, supermarket, local shops, specialised shops, etc). This will ensure more representativeness of outlet and price collection samples during future base revisions of CPI.

3.16 The integrated Pradhan Mantri Grameen Kalyan Anna Yojana (PMGKAY) was launched from January 2023 by the Government of India, under which 75% rural and 50% urban population was targeted to provide free food including rice, wheat, pulses, edible oil, salt, sugar etc through Fare Price Shops. EG had detailed discussion on the treatment of free food items, distributed through public distribution system, in CPI compilation. PSD proposed a robust methodology for including free food items which can deal with all the price scenarios. After detailed discussions and brainstorming sessions, it was decided **not to include free social transfers** for any item in CPI. This will be in accordance with the international guidelines and basic principles of the Consumer price index i.e. CPI should include only those items for which expenditure is being made by the households.

3.17 In order to establish the connectivity between CPI 2012 and CPI 2024 series, the EG recommended to release the linking factor for calculation of back series of All India combined, rural and urban level with the first release of CPI 2024. However, more deliberations would be required for the preparation of granular back series.

3.18 Item-level CPI indices would be released for each State and sector. Further, dissemination would cover all COICOP levels, namely Divisions, Groups, Classes, Sub-classes and Items, for both State-wise and sector-wise (Rural, Urban and Combined).

3.19 The first press release of the revised CPI series will include a concise summary note highlighting the new data sources and the major methodological changes in the CPI 2024 series.

3.20 On the issue of compilation and dissemination of core inflation by MoSPI, EG recommended that since there is no uniform definition of core inflation, MoSPI should not publish core inflation as it may be interpreted in different ways by different stakeholders.

Chapter 4

Detailed Recommendations

4.1 Adoption of COICOP 2018

4.1.1 The Classification of Individual Consumption According to Purpose (COICOP) is the international classification of household expenditure developed under the guidance of United Nations Statistics Division. The objective of the COICOP is to provide a framework of homogeneous categories of goods and services from the point of view of its usage by the households. In India**,** in the CPI (2012=100) series COICOP 1999 was adopted with some deviations to classify the items into different groups, subgroups and sections. The hierarchy namely Groups, Subgroups and Sections was created for the Indian context. The nomenclature as well as mapping of the items was not completely aligned with COICOP 1999.

4.1.2 In March 2018, during the 49th Session of the United Nations Statistical Commission (UNSC) endorsed the revised COICOP classification *i.e.* COICOP 2018 as the internationally accepted and recommended standard. The new COICOP 2018 reflects the significant changes in goods and services in some areas, improves the links of COICOP to other classifications, and addresses emerging statistical and policy needs of several international organizations.

4.1.3 Classification is a central theme in the compilation of the CPI. The classification of items is also important because it establishes a framework from which boundaries of the representative items for inclusion in the index are defined and drawn. The classification system also helps in identifying the level of the hierarchy suitable for publication. Most countries have now moved to the international standard classification as prescribed by COICOP.

4.1.4 After the launch of HCES 2022-23, as the CPI updation exercise of CPI was started, the *de novo* market survey was carried out. For base price collection, the pre-requisite was to provide an item list to the Field Offices for the new CPI series. The items for which expenditure share are captured in the HCES are called **"Weighted item"** and the items for which prices are to be collected are called **"Priced items"**. For CPI 2024, these priced items were mapped with the items of HCES 2023-24. Initially the same classification structure as followed in CPI 2012 was adopted in CPI 2024 as well.

4.1.5 During interactions with the international organisations, including Article IV consultations of IMF, World Bank and UNECE, the non-adoption of the COICOP classification system in the CPI framework was repeatedly highlighted as an area of concern. This issue was subsequently deliberated in the meetings of the Expert Group, where it was emphasized that, in order to enhance credibility of the Indian CPI, it would be desirable to align the item classification structure with the latest COICOP framework. Therefore, to adopt international standard as a best practice and to ensure comparability of Indian CPI with the price indices across the world, EG recommended for mapping HCES items as per COICOP 2018 in CPI 2024.

4.1.6 In this context, the Price Statistics Division (PSD) prepared a detailed comparison between the existing CPI item classification and the COICOP 2018 structure. The COICOP 2018 framework is organised in a hierarchical structure consisting of 15 Divisions, 63 Groups, 186 Classes and 338 Subclasses. The exercise revealed several challenges, as the HCES was not aligned with the COICOP. Consequently, for a number of HCES items, direct and unambiguous mapping to COICOP 2018 was not feasible. It necessitated rearrangement of the expenditure share based on available administrative data.

4.1.7 For instance, certain clothing items in HCES do not distinguish between gender, whereas COICOP 2018 provides separate classifications for clothing items for men and women. Similarly, footwear items in HCES are not differentiated by men, women, infants

and children's categories, while COICOP 2018 prescribes distinct classifications for these groups. These differences necessitated careful examination and methodological considerations while aligning the CPI item structure with COICOP 2018.

4.1.8 An initial attempt to align the HCES items with COICOP 2018 was undertaken by the PSD and the proposed classification was presented to the Expert Group. However, due to the issues outlined above, it was not possible to carry out a complete one-to-one classification of all HCES items under COICOP 2018.

4.1.9 Accordingly, it was decided that, in cases where direct classification as per COICOP 2018 was not feasible, the concerned HCES items would be split into multiple weighted items to ensure conformity with the COICOP structure. The proportions for men, women and children were derived using data from "Census 2011", with children defined as persons up to 14 years of age. The ratios for primary, secondary and higher education were derived using enrolment data from the "Unified District Information System for Education (UDISE)" and the "All India Survey on Higher Education (AISHE)". UDISE enrolment data are available up to 2023–24 but AISHE data are available only up to 2021–22. Accordingly, enrolment data for the year 2021–22 from both UDISE and AISHE were used to ensure consistency across education levels. Based on this approach, the following HCES items were split into multiple weighted items following the calculation as shown in Table 4.1;

Table 4.1: List of HCES Items split in two or more CPI items

Weighted Item in CPI 2024 (aligned with COICOP 2018)	**HCES 2023-24 Items**
Beverages: cocoa and chocolate drink	In equal proportion of other beverages: cocoa, drinking chocolate, health **(278)**#
Health drinks	
Driver	Two third of watchmen/security guard, driver **(027)**
Watchmen/security guard	One third of watchmen/security guard, driver **(027)**

Weighted Item in CPI 2024 (aligned with COICOP 2018)	**HCES 2023-24 Items**
Health supplements (Chawanprash)	In equal proportion of health supplements (protein powder, probiotic tablet and drinks, chawanprash etc.) **(014)**
Health supplements (probiotic tablet and drinks)	
Health supplements (protein powder)	
Helmet	In equal proportion of umbrella, raincoat, helmet **(441)**
Umbrella and Raincoat	
Jam/ jelly	In equal proportion of sauce, jam, jelly, mayonnaise (gm) **(295)**
Sauce and Mayonnaise	
Photocopying charges	1/5 of stationery, photocopying charges **(404)**
Stationery	4/5 of stationery, photocopying charges **(404)**
Prepared sweets - non milk based	In equal proportion of prepared sweets **(004)**
Prepared sweets- milk based	
Wheat	In equal proportion of wheat/ atta (Other sources) **(108)**
Wheat atta	
Coat, jacket, blazer, sweater, sweatshirts and windcheater (ladies)	Proportion of coat, jacket, blazer, sweater, sweatshirts, windcheater used by women **(354)**
Coat, jacket, blazer, sweater, sweatshirts and windcheater (gents) *	Proportion of coat, jacket, blazer, sweater, sweatshirts, windcheater used by men **(354)**
Tuition fees (Primary/Upper Primary class)	Proportion of tuition and other fees (school, college, etc.) **(405)**
Tuition fees (Secondary/Upper Secondary class)	Proportion of tuition and other fees (school, college, etc.) **(405)**
Tuition fees (Higher education)	Proportion of tuition and other fees (school, college, etc.) **(405)**

*The numbers given in the bracket are the item numbers of the item as per HCES 2023-24.*

** The weighted item "Coat, jacket, blazer, sweater, sweatshirts and windcheater (gents)" has been constructed by combining the HCES item "Western suit set (no.) (032)" with the male proportion of the HCES item "Coat, jacket, blazer, sweater, sweatshirts and windcheater (354)". Table 4.2 may be referred for more clarity.*

4.1.10 In addition to the above, it was decided to club certain HCES items into a single weighted item as the large number of HCES items required splitting them based on the usage by men, women and, wherever applicable, children in order to align with the COICOP 2018 classification. Accordingly, in some cases, HCES items were first clubbed and subsequently proportionately split into multiple weighted items using the relevant proportions. In certain other cases, a weighted item was constructed by aggregating the proportions or the full weight of one or more related HCES items. The details of these adjustments are presented in Table 4.2;

Table 4.2: List of HCES items grouped in CPI items

Weighted Item in CPI 2024 (aligned with COICOP 2018)	HCES 2023-24 Items
Other garments for women or girls	blouse, dupatta/stole **(366)** + dresses, jumpsuits, frocks **(365)** + kurta-pyjama suits: females **(360)** + proportion of innerwear, socks, and other hosiery items used by women **(370)** + proportion of sherwani, lehenga, gown used by women **(033)**
Other garments for men or boys	kurta-pyjama suits: males **(358)** + Proportion of innerwear, socks, and other hosiery items used by Men **(370)** + Proportion of sherwani, lehenga, gown used by Men **(033)**
Tops, shrugs, kurti (ladies)	kurta, kameez, kurti **(361)** + Proportion of T-shirts, polos, tops, shrugs used by women **(363)**
Footwear for men	Proportion of [leather boots, shoes **(390)** + leather sandals, chappals, etc. **(391)** + rubber / PVC footwear **(393)** + other footwear **(394)** + other leather footwear **(392)** + footwear: second-hand **(395)]** used by Men
Footwear for women	Proportion of [leather boots, shoes **(390)** + leather sandals, chappals, etc. **(391)** + rubber / PVC footwear **(393)** + other

Weighted Item in CPI 2024 (aligned with COICOP 2018)	HCES 2023-24 Items
	footwear **(394)** + other leather footwear **(392)** + footwear: second-hand **(395)**] used by women
Footwear for infants and children	Proportion of [leather boots, shoes **(390)** + leather sandals, chappals, etc. **(391)** + rubber / PVC footwear **(393)** + other footwear **(394)** + other leather footwear **(392)** + footwear: second-hand **(395)**] used by Children
Trousers, jeans, salwars, Skirts (ladies)	Pyjamas, salwar, leggings, palazzo **(362)** + proportion of trousers, jeans, jeggings, skirts for used by women **(364**)+ proportion of shorts, bermuda, maxis, housecoats, baba suit, nightdress, loungewear etc used by women **(368)**
Shirts, T-shirts, Kurta (gents)	shirts **(031)** + proportion of T-shirts, polos, tops, shrugs used by men **(363)**
Trousers, jeans, track pant, shorts (gents)	track suit, track pant, joggers **(034)** + proportion of trousers, jeans, jeggings, skirts used by men **(364**) + proportion of shorts, bermuda, maxis, housecoats, baba suit, nightdress, loungewear etc**.** used by men **(368)**
Coat, jacket, blazer, sweater, sweatshirts and windcheater (gents)	western suit set **(032)** + proportion of coat, jacket, blazer, sweater, sweatshirts, windcheater used by men **(354)**

4.2.11 Further, certain HCES items were clubbed, either because they were similar in nature or because one of the items was difficult to price separately. The details of such items are presented in Table 4.3;

Table 4.3 List of HCES items grouped in CPI

Weighted Item in CPI 2024 (aligned with COICOP 2018)	HCES 2023-24 Items
Books/ journals	books, journals (incl. e-books, audio books): first hand **(400)** + books, journals, etc.: second hand **(401)**
Clothing materials	cloth for coat, trousers, suit, etc **(353)** + cloth for shirt, pyjama, kurta, salwar, etc. **(352)**
Cooked meals	cooked meals purchased **(280)** + cooked meals purchased at subsidized rate **(076)**
Dhoti/ Lungi	dhoti **(350**) + lungi **(367)**
Fuel (biogas and gobar gas)	biogas & gobar gas **(343)** + other fuel **(346)**
House Rent	house rent, garage rent (actual) (**520**) + house rent, garage rent (imputed) (**539**)
Other cereals and products	other cereals & products **(122**) + cereal substitutes: tapioca, etc. (**139)**
Other consumer services excluding conveyance	parking charges, coolie/porter charges, toll charges, miscellaneous expenses, etc.) **(497)** + other consumer taxes & cesses **(899)**
School uniforms	school/college uniform: girls **(357)** + school/college uniform: boys **(356)**
Other consumer rent	other consumer rent **(523)** + residential land rent **(522)**
Other articles of clothing (including knitting wool)	clothing (first-hand): other (incl. knitting wool) **(374)** + clothing: second-hand **(375)** + face mask, gloves **(030)** + headwear, belts, ties, hat, scarf, muffler, etc. **(373)**
Medicine	Medicine **(410)** + Medicine (Non-Institutional) **(420)**
X-ray, ECG and pathological test	X-ray, ECG, pathological test, etc. **(411)** + X-ray, ECG, pathological test, etc. (Non-Institutional) **(421)**
Doctor's/surgeon's fee	doctor's/surgeon's fee **(412)** + doctor's/surgeon's fee **(422)**
Other medical expenses	other medical expenses (**414**) + other medical expenses (**424**)

4.1.12 The remaining HCES items were retained as weighted items without any modification. While classifying the weighted items as per COICOP 2018, it was observed that in the case of certain weighted items their constituent priced items did not fall within a single COICOP subclass. In such cases, the relevant subclasses were re-named and re-defined so as to appropriately encompass all the constituent priced items.

4.1.13 Further, the item "*Paan*" (Hindi term for betel leaves) was classified in "Group 02.4: Narcotics", under "Class 02.4.0" and subclass "02.4.0.0" as per COICOP 2018. However, as betel leaves are not considered narcotics in the Indian context, *Paan* was mapped to the *Tobacco* subclass. Accordingly, the *Tobacco* subclass was re-named as "*Paan and other Tobacco products*", and the corresponding Class, Group and Division were also re-named to maintain consistency in the hierarchical structure.

4.1.14 Additionally, the nomenclature of certain Subclasses, Classes, Groups and Divisions under COICOP 2018 was found to be not fully aligned with commonly used Indian terminologies. These were therefore suitably re-named to better reflect the Indian context. In total, 37 Subclasses, 9 Classes, 3 Groups and 2 Divisions were re-named.

4.1.15 It was ensured that, except for the treatment of the item "*Paan*", there was no alteration in the basic conceptual structure of COICOP 2018. Following these adjustments, all CPI weighted items were successfully mapped to the COICOP framework, covering 12 Divisions, 43 Groups, 92 Classes and 162 Subclasses

4.2 Item basket and weights

4.2.1 The item basket and their corresponding weights in CPI 2024 are drawn from the HCES 2023-24. The weights were also classified for items, subclasses, classes, groups and divisions as per COICOP 2018. As per international standards and best practices, the calculation of a CPI usually proceeds in two stages. In the first stage, elementary indices are compiled for each of the elementary aggregates. Elementary aggregates are usually the smallest groups of goods and services for which expenditure data are available. In

India, CPI is compiled not only at national level but also for the States & UTs separately. Further, in view of the sectoral consumption diversity, urban and rural sector CPIs for All India and States/UT level are also compiled. Therefore, the item basket was first decided for the States/UTs and then the national level basket was developed as a composite basket of all States/UTs.

4.2.2 In the second stage, a weighted average of these elementary indices is taken using the expenditure shares of the elementary aggregates as weights. Therefore, the weights of each item, subclass, class, group and division were needed to compile sectoral CPIs at State/UT level. Further, to arrive at the State/UT combined level CPI, the expenditure share of rural and urban was also required for each State/UT. The expenditure share of each States/UTs for each sector is also calculated for compiling all India sectoral and combined indices.

4.2.3 During scrutiny of the expenditure data, it was observed that for certain important consumption items—such as air fare, diesel and railway fare—expenditure was not reported in HCES 2023–24 for some States, including some major States. However, expenditure information for these items was available in the preceding round of the survey, namely HCES 2022–23. In order to ensure completeness of the expenditure basket and to avoid gaps in the derivation of item weights, the Expert Group recommended the use of expenditure data from HCES 2022–23, at the State and sector level, for those items for which expenditure was not reported in HCES 2023–24. This approach helped maintain continuity and consistency in the construction of the CPI.

4.2.4 In case of Chandigarh State, the expenditure was reported for both rural and urban sectors in the HCES data as sample selection of HCES 2022-23 was done on the basis of Census, 2011 frame. However, Chandigarh has no rural area and the market survey conducted for the new CPI series reported no rural areas in Chandigarh, resulting in the non-availability of price data for the rural sector of Chandigarh in the new CPI series.

Accordingly, it was decided to merge the rural sector expenditure with the urban sector expenditure for Chandigarh.

4.2.5 In the case of the item *"Coarse Grains – Other Sources"*, expenditure on its constituent crops—namely jowar, bajra, barley, maize, ragi and small millets—was reported for 10 States, namely Rajasthan, Punjab, Haryana, Gujarat, Andhra Pradesh, Tamil Nadu, Kerala, Karnataka, Telangana and Uttar Pradesh. For the remaining 26 States, only aggregate expenditure for *"Coarse Grains – Other Sources"* was reported. Similarly, for the item *"Coarse Grains – PDS"*, expenditure was reported for a total of 15 States. However, item-wise expenditure on the constituent crops was available for only 10 States. For the remaining five States—namely Chhattisgarh, Jharkhand, Madhya Pradesh, Maharashtra and Odisha—only aggregate expenditure for *"Coarse Grains – PDS"* was reported.

4.2.6 Considering the increasing consumption of almost all the coarse grains and government programmes such as the **International Year of Millets 2023 and efforts to promote millets under the National Food Security Mission**, which encourage the choice and consumption of millets and coarse grains, the Price Statistics Division (PSD) proposed to treat each of the constituent individual crops of coarse grains as separate weighted items. The growing significance of coarse grains was also acknowledged by the Expert Group and was subsequently approved.

4.2.7 The expenditure of the individual constituent crops for remaining 25 States, where expenditure on *Coarse Grains* was reported in any of the sectors, was estimated using production data from the Unified Portal for Agricultural Statistics (UPAg) portal. For each coarse grain, 50% of the expenditure was apportioned in proportion to the expenditure reported in HCES 2023–24, while the remaining 50% was allocated based on the production of that coarse grain in the respective State. The following formula was used-

$$Expenditure = A + (B/C)$$

Where $A = \frac{Expenditure\ on\ coarse\ grain}{12}$

$$B = \frac{Expenditure\ on\ coarse\ grain}{2} \times Produced\ quantity$$

$$C = Sum\ of\ produced\ quantity\ of\ all\ the\ 6\ grain$$

The above calculation would consider the production of the particular coarse grain in the State and overall expenditure of the "coarse grains" will remain same as captured in HCES 2023-24. In cases where the sum of produced quantity for a State is zero, the expenditure was calculated as **Expenditure on coarse grain / 6**.

4.2.8 Similarly, for the item *"Coarse Grains – PDS"*, expenditure was reported for a total of 15 States. Of these, expenditure of individual constituent coarse grains was available for 10 States. For the remaining five States, the expenditure of each individual coarse grain was derived by distributing the total expenditure on *"Coarse Grains – PDS"* in proportion to the expenditure of the corresponding individual coarse grains under *"Coarse Grains – Other Sources"*.

4.2.9 In CPI 2012 series, all weighted items were not included in the item basket. Instead, a selection criterion known as the four-fold criteria was applied to identify the important items to be retained in the basket. The rationale for prescribing such benchmarks was twofold: first, an excessively large basket tends to result in non-response from shopkeepers; and second, items with negligible weights have an insignificant impact on the overall index. It was, therefore, considered necessary to prescribe benchmarks in order to arrive at an optimal basket size. In this process, a degree of subjective judgement was exercised, keeping in view the overarching objective that no important item

reflecting consumption behaviour was excluded from the basket. The four-fold criteria is as follows:

i) include all PDS items

ii) include all items accounting for 1% or more of total expenditure at sub-group level.

iii) include all items accounting for more than specified percentage of total expenditure of all consumption items as given below:

Table 4.4: Criteria for determining item basket in CPI 2012

Sl. No.	Group	Group Description	Specified percentage out of total expenditure
1	Group1, Group2, Group 4, Group 6	Food and Beverages, Paan, Tobacco and Intoxicants, Housing and Miscellaneous excluding 'Bedding'	>0.04%
2	Group 5	Fuel and Light	>0.03%
3	Group 3	Clothing and Footwear, Section 'Bedding; under subgroup 'Household Goods and Services'	>0.02%

iv) include all items for which more than 75% households have reported consumption.

4.2.10 Initially, while framing the weighting diagram for the new CPI series under the existing classification structure, the Expert Group recommended the adoption of the same four-fold selection criteria that had been used in the earlier CPI (2012=100) series for the CPI (2024=100) series as well. However, following the adoption of COICOP 2018, the same selection criteria could not be applied, as the hierarchical structures of the two classification systems were fundamentally different. Accordingly, the Expert Group

recommended the formulation and adoption of a different selection criteria suited to the COICOP 2018 framework.

4.2.11 As mentioned earlier, weighted items were constructed through a combination of measures, including the splitting of HCES items, the clubbing of certain HCES items, other necessary adjustments to align the item structure with the COICOP 2018 framework, and the consideration of each constituent crop of coarse grains as separate weighted items, taking into account their growing importance in consumption. The expenditure of weighted items was calculated using proportions and adjustments detailed in Tables 4.1, 4.2 and 4.3.

4.2.12 After the base prices were finalised, items with positive expenditure but without corresponding base prices were examined separately for each State and sector. The expenditure pertaining to such items, for which base prices were not available, was re-distributed on pro-rata basis among other items within the same Subclass in the respective State and sector. In cases where base prices were not available for all items within a Subclass, the total expenditure of that Subclass was re-distributed among other items within the same Class. In cases where base prices were not available for all items within a Class, the expenditure was re-distributed to other items within the same Group. Similarly, where base prices were not available for all items within a Group, the expenditure was re-distributed to other items within the same Division.

4.2.13 The Expert Group in its 11th and 12th meeting noted that illegal items are generally excluded from the Consumer Price Index, as it is practically difficult to develop reliable weights or collect prices for such items. In the case of *ganja*, whose use up to a certain limit is not considered illegal in India, expenditure was reported in the HCES. This issue was deliberated in the 11th meeting of the Expert Group, which included Dr. Brian Graf from the IMF and subsequently in the 12th meeting as well. The Expert Group recommended that the expenditure on *ganja* be re-distributed among other items of the

Division- Paan, tobacco and other intoxicants for every state and sector for the purpose of deriving weights in the new series.

4.2.14 The Expert Group further observed that with the adoption of Computer Assisted Personal Interviewing (CAPI) for price collection, the issue of non-response in data collection is expected to be considerably reduced. The use of CAPI has improved the efficiency and reliability of field operations, thereby facilitating the collection of price data for a larger number of items without imposing much burden on respondents and investigators. It was also noted that the compilation system has been significantly strengthened through the use of robust, technology-enabled software capable of handling large volumes of data efficiently. This enhanced technological capacity enables seamless processing, validation and compilation of price data across a comprehensive item basket. In view of these developments, the Expert Group concluded that the rationale for applying a selection benchmark, such as the four-fold criteria used in the earlier CPI series, no longer holds. Accordingly, it was recommended that all weighted items (358) may be included in the CPI item basket without the application of any selection criteria or benchmark, provided that their base prices are available. The weights of items, subclasses, classes, groups and divisions are given at **Annexure 5.3**.

4.3 Sample Selection

The Census 2011 data was used by the National Statistics Office (NSO) for the selection of rural and urban households under the Household Consumption Expenditure Survey (HCES) 2022–23. Accordingly, the sampling frame adopted for HCES has also been utilized for the selection of villages and towns in CPI 2024.

4.3.1 *S*ample design for selection of villages for rural price collection

4.3.1.1 In the CPI 2012 series, a total of 1,181 villages were selected across 582 districts based on Census 2001. As per the sampling frame of the Consumption Expenditure Survey (2022–23), provided by the Household Survey Division (HSD), NSO, the number

of districts in the country has been increased to 685, based on Census 2011 and subsequent updates. In view of this, there was a substantial increase in the number of districts and villages because of rapid urbanization. In view of this, EG recommended to draw a fresh sample of villages from the latest rural sampling frame used in HCES.

4.3.1.2 In the similar lines as in CPI 2012 series, a sampling procedure for the selection of rural villages was proposed in the first Expert Group meeting of the Base Revision of CPI. Wherein, it was observed that the number of allocated villages for certain States (Northeastern States) had increased manifold and had become much higher than the major states which had much higher rural population. It was explained that the discrepancy in State wise allocation of sample villages occurred due to the criteria of selection of two villages from each district. Several small States specifically in the northeastern region notified a large number of districts resulting in larger number of sample village allocation in these states.

4.3.1.3 Therefore, EG recommended to modify the sample design using the criteria of allocation of number of sample villages according to NSS regions. Accordingly, two stages of sampling method were used for selecting villages for the new series. **Stage 1** of the criteria was to allocate sample villages across State/UTs using NSS region wise rural population share, while **Stage 2** was allocating the State/UT wise number of sample villages across districts as per district wise rural population share within NSS region.

4.3.1.4 Following the below mentioned procedure, villages were selected in the CPI 2024 series;

(i) All districts of the country were considered for the collection of rural prices. Since there are 685 districts in the country as per census 2011, ensuring at least two villages from each district brings the total close to 1,400. The sample size of approximately 1400 is within the range derived from the sample size calculator, indicating its statistical validity.

(ii) In step 1, each of the **685** districts were allocated one village to form the base layer of the rural sample.

(iii) In step 2, the remaining 715 villages (out of a total of 1,400) were distributed among States and UTs in proportion to their share of the rural population at the NSS region level, ensuring fair and population-aligned representation. **After Step 2, the total sample size reached to 1,393.**

(iv) In step 3, a minimum allocation norm was followed, with at least 5 villages allotted to each UTs and 8 villages to each State. Wherever the proportionate allocation fell below this threshold, additional villages were added to meet the minimum requirement. **Total sample increased to 1,418 after step 3.**

(v) Further in step 4, in States and UTs where the revised allocation was lower than the rural sample size of CPI 2012 series, more villages were added to ensure no reduction in village markets in each State/UT. **Upon completion of Step 4 and sample verification, the total sample villages stood at 1,465.**

4.3.1.5 **Village Selection Procedure within Districts**

(i) In each district of a State/UT, the top 100 villages were selected based on descending order of population as per Census 2011.

(ii) These villages were divided into four segments, each containing 25 villages. Segment 1 consists of the top 25 most populous villages, Segment 2 includes the next 25 villages, and so on, with Segments 3 and 4 formed in a similar manner.

(iii) If the number of villages to be selected from a district exactly 4, 1 village was selected from each of the four segments. If the allocation is three, villages is selected from the first three segments, and similarly for lower allocations. If the number of villages to be selected from a district exceeds 4, the additional villages is chosen sequentially from segment 1, followed by segment 2, and so on.

(iv) From each district, the allocated number of villages were selected **randomly,** ensuring, wherever possible, representation from **different tehsils.**

4.3.1.6 The villages selected from the UT of Chandigarh was dropped after receiving confirmation of urbanization of those villages from the concerned field offices during market survey citing a government notification of 2018 regarding complete urbanization in the UT of Chandigarh.

4.3.1.7 The State/UT-wise number of village markets selected for price collection of CPI 2024 *vis-à-vis* CPI 2012 is given below:

Table 4.5: Number of villages market selected for Rural Price collection

State/UT code	State/UT Name	Number of Rural markets	
		CPI 2012	CPI 2024
01	Jammu & Kashmir	28	28
02	Himachal Pradesh	24	24
03	Punjab	34	37
04	Chandigarh	5	-
05	Uttarakhand	26	26
06	Haryana	38	38
07	Delhi	14	13
08	Rajasthan	64	77
09	Uttar Pradesh	140	203
10	Bihar	74	117
11	Sikkim	8	8
12	Arunachal Pradesh	16	17
13	Nagaland	16	16
14	Manipur	18	18
15	Mizoram	16	16
16	Tripura	8	10
17	Meghalaya	14	14
18	Assam	46	57
19	West Bengal	64	75
20	Jharkhand	36	45
21	Odisha	49	60
22	Chhattisgarh	32	43

State/UT code	State/UT Name	Number of Rural markets	
		CPI 2012	CPI 2024
23	Madhya Pradesh	70	96
24	Gujarat	50	62
25	Daman & Diu and Dadra & Nagar Haveli	10	6
27	Maharashtra	66	86
28	Andhra Pradesh	34	43
29	Karnataka	54	62
30	Goa	6	8
31	Lakshadweep	5	4
32	Kerala	28	29
33	Tamil Nadu	58	62
34	Puducherry	5	5
35	A & N Islands	5	5
36	Telangana	20	50
37	Ladakh	-	5
All India		**1181**	**1465**

4.3.2 Sample design for selection of urban markets for price collection

4.3.2.1 There were 1114 urban markets spread across 310 towns surveyed in the CPI 2012 series and the cities having population more than 9 lakh (as per Census 2001) were purposively selected on the presumption that such cities might have become million plus cities at the time of conducting Market Survey in 2008-09.

4.3.2.2 For CPI 2024 series, the EG recommended to increase number of markets in metropolitan cities in view of the growing concentration of population in larger cities, the heterogeneous nature of consumer behaviour and the availability of a wide variety of markets offering products of differing quality. Considering the limited manpower & financial resources of NSS, EG also recommended to limit the final urban market allocation to be kept around 1350. It was suggested to reduce market allocation in towns having population less than 9 lakhs marginally and reallocate the remaining markets to towns having population more than 9 lakh . It was also decided to allocate more markets to the mega cities (*i.e.* cities having population more than 75 lakh *viz*. Delhi, Mumbai, Bengaluru).

4.3.2.3 In the urban sampling frame used for HCES 2022-23, there were 7,747 towns (non-zero population as per Census 2011 and updated further). Therefore, for CPI urban market selection, at first stage, the towns were classified into 6 categories according to population criteria. Composition of different categories along with the number of towns was given as below**.** The first four categories were based on Census 2011 urban population. The fifth category comprises of remaining State/UT capitals, excluding those already selected in previous 4 categories. All other towns not considered under first five categories are grouped into category six.

Table 4.6: Count of towns in different categories

S.No.	Category of towns	No. of Towns
1	Having population more 75 Lakh	3
2	Having population 50 lakh to 75 Lakh	2
3	Having population 25 lakh to 50 lakh	7
4	Having population 9 lakh to 25 lakh	41
5	Remaining State/UT Capitals	17
6	Other towns	7677
Total		**7747**

4.3.2.4 All towns under serial category number 1 to 5 in the above table were selected. Other than the selected towns belonging to first five categories, there were 7677 towns (excluding towns of Delhi) in the urban sampling frame used for sample selection of HCES 2022-23. 'Delhi + New Delhi' town selected for representing Delhi in the urban sample list. For Category 6, stratification was carried out within each State/UT. For allocation within the State/UT, the remaining towns were classified into four strata based on the Population Census 2011:

Table 4.7: Composition of stratum for urban sampling

Stratum	Population
I	Towns with population more than 1 lakh but less than 9 lakh
II	Towns with population more than 50000 but less than 1 lakh
III	Towns with population more than 20000 but less than 50000
IV	Towns with population less than 20000

From each stratum, number of towns to be selected was decided using following formula. Let the number of towns to be selected be X; and the total population of i^{th} stratum is P_i, then,

$$X = P_i/9,00,000$$

X is rounded to the nearest integer, with a condition that minimum one town is selected from each stratum.

4.3.2.5 In the second stage, the cities / towns with a population greater than 75 lakh, 28 markets were selected from each of the 3 towns, resulting in selection of a total of 84 markets. In the population category of 50 to 75 lakh, 20 markets were selected from each of the 2 towns, 40 markets get selected. For towns with a population between 25 to 50 lakh, 14 markets were selected from each of the 7 towns, giving a total of 98 markets. In the category of 9 to 25 lakh population, 10 markets were selected from each of the 41 towns, accounting for 410 markets. The 6 markets were selected from each of the remaining 17 capitals, contributing 102 markets. Altogether, these five categories accounted for 734 markets.

4.3.2.**6** As remaining towns were grouped into four strata (Stratum I to Stratum IV). Allocation of markets to category 6 towns, distributed across Stratum I, II, III and IV were kept as 3 – 2 – 2 – 1 respectively. In Stratum I, 3 markets were selected from each of the 78 towns, resulting in 234 markets. In Stratum II, 2 markets were selected from each of the 71 towns, giving 142 markets. In Stratum III, 2 markets were selected from each of the 100 towns, accounting for 200 markets. In Stratum IV, 1 market was selected from each of the 122 towns, resulting in 122 markets. These four strata together contributed to 698 markets.

4.3.2.7 Thus, combining both stages, a total of 1,432 markets were selected across all categories and strata. The details with regard to market allocation in towns belonging to all six categories are as follows:

Table 4.8: Count of towns and markets as per town population

Category	Population	Allocated number of markets to each town	Count of towns	Total markets
1	>7500000	28	3	84
2	5000000 - 7500000	20	2	40
3	2500000 - 5000000	14	7	98
4	900000 - 2500000	10	41	410
5	capitals	6	17	102
Total of Category (1 to 5)			**70**	**734**
6	Stratum I	3	78	234
	Stratum II	2	71	142
	Stratum III	2	100	200
	Stratum IV	1	122	122
Total			**441**	**1432**

Initially, 1432 urban quotations were allocated for the new series to different states/ UTs. **However, after the final verification by the filed official's number of urban towns were 434 and urban markets were 1395 for the CPI 2024 series.** State/UT-wise number of towns and urban markets selected for price collection of CPI (Base 2024=100) is given in **Table 4.9.**

Table 4.9: Number of towns and urban markets selected for CPI 2024

State/UT code	State/UT name	Number of Towns		Number of Market	
		CPI 2012	CPI 2024	CPI 2012	CPI 2024
01	Jammu & Kashmir	11	10	28	26
02	Himachal Pradesh	7	7	16	12
03	Punjab	7	11	30	39
04	Chandigarh	1	1	12	10
05	Uttarakhand	12	13	32	26
06	Haryana	9	10	32	29
07	Delhi	1	1	24	28
08	Rajasthan	15	16	50	62
09	Uttar Pradesh	18	42	92	154
10	Bihar	11	13	38	37
11	Sikkim	3	7	8	12
12	Arunachal Pradesh	7	7	16	14
13	Nagaland	7	6	18	13
14	Manipur	7	7	16	14

State/UT code	State/UT name	Number of Towns		Number of Market	
		CPI 2012	CPI 2024	CPI 2012	CPI 2024
15	Mizoram	7	7	16	16
16	Tripura	7	7	16	13
17	Meghalaya	7	7	18	16
18	Assam	11	11	28	26
19	West Bengal	13	25	64	68
20	Jharkhand	10	10	30	35
21	Odisha	9	9	26	22
22	Chhattisgarh	10	9	30	34
23	Madhya Pradesh	16	20	60	72
24	Gujarat	12	20	60	87
25	Daman & Diu and Dadra & Nagar Haveli	4	7	12	14
27	Maharashtra	15	36	86	184
28	Andhra Pradesh	9	16	34	51
29	Karnataka	17	19	60	81
30	Goa	7	6	18	12
31	Lakshadweep	1	6	4	6
32	Kerala	11	18	32	35
33	Tamil Nadu	16	31	62	84
34	Puducherry	4	4	12	11
35	A & N Islands	3	2	8	7
36	Telangana	5	10	26	39
37	Ladakh	-	3	-	6
All India		**310**	**434**	**1114**	**1395**

4.3.3 Online markets for price collection

4.3.3.1 In view of growing use of e-commerce platforms by the households in India, the Expert Group of Base revision of CPI 2024 in its first meeting suggested to explore possibility of price collection from online platforms in the new series. Thereafter, in the third meeting of Expert Group, it was deliberated that the ongoing HCES did not capture the item-wise weights of online purchases from e-commerce platforms and therefore suggested that the online platforms popular in the bigger towns, having more than 25 lakhs population, may be treated as a separate market and prices available on these platforms may be collected by the respective field offices. These markets will be in

addition to brick-and-mortar markets and would be used for index compilation in the CPI 2024 series. The online markets are introduced for the first time in CPI 2024 series.

4.3.3.2 Since item wise weights of online purchase was not captured in the on-going HCES, it was not possible to assign weights to the online purchases in the revised CPI series. To understand the nuances of the online price data collection and price variation trend between the online platforms and online *vs* brick-mortar shops, as recommended the following were the process for price collection from online market:

(i) Prices to be collected from 12 towns ***(Mumbai, Delhi, Bengaluru, Hyderabad, Ahmedabad, Chennai, Kolkata, Surat, Pune, Jaipur, Lucknow and Kanpur)*** with more than 25 lakh urban population as per Census 2011 for this exercise.

(ii) Item specifications captured from online platforms to be decided based on the topmost item specifications reported in the markets covered for each item in the brick & mortar shops of each of the 12 towns.

(iii) Prices to be collected for all four weeks from these online platforms.

4.3.3.2 The EG also recommended to collect more granular information related to source of purchase by the households and item wise share of expenditure using online/e-commerce platforms in the next round of HCES.

4.4 Market Survey

4.4.1 The market survey in CPI mainly encompasses following steps;

a. verification of identified villages and towns,

b. selection of markets in the selected towns and local areas of selected villages

c. Mapping of shops for all the items in the CPI basket

d. Determination of item specifications

At the core of CPI compilation lies the process of price collection from selected markets, shops and service providers. The accuracy, credibility and policy relevance of CPI depend critically on whether these markets and shops are truly representative of current

household consumption behavior and whether the specifications of items priced remain stable and comparable over time. Recognizing this fundamental linkage, Market Survey occupies a pivotal position in the CPI framework and assumes huge importance during a base revision exercise.

4.4.2 The CPI 2012 series with base year 2012=100 was introduced from January 2013, drawing upon consumption patterns observed in the Consumer Expenditure Survey (CES) 2011–12. While the series has served as a robust indicator over the years, operational experience and field feedback indicated that several components of the underlying price collection framework, particularly the market frame, shop/outlets and specifications, had gradually lost alignment with evolving consumption realities. Rapid urbanization, emergence of new towns and peri-urban areas, expansion of organized retail chains, proliferation of e-commerce platforms, diversification of food and non-food items, and changes in public provisioning systems such as the Public Distribution System (PDS) necessitated a comprehensive re-examination of the market structure for CPI.

4.4.3 In this backdrop and following the availability of updated consumption data from the HCES 2022–23 and 2023–24, MoSPI initiated the Base Revision of CPI from 2012=100 to 2024=100. From the inception of this exercise, it was clearly recognized that a detailed, nationwide and methodologically rigorous market survey would be indispensable for anchoring the revised CPI series firmly in contemporary consumption behavior. From its initial meetings, the Expert Group devoted significant attention to the issue of market representativeness. Members reviewed the approach adopted during the previous base revision and observed that while item baskets and weights were updated, the market frame had not been comprehensively revised. The Expert Group noted that such an approach would be inadequate in the present context, given the scale and pace of structural changes witnessed in the Indian economy over the past decade. Through successive meetings, the Expert Group deliberated upon the scope, sequencing and methodology of the Market Survey and recommended the conduct of a fresh market survey covering both rural and urban sectors, encompassing verification of sampling

units, identification of markets and local areas, selection of representative shops, fixation of Structured Product Descriptions (SPDs), and integration of specialized pricing modules.

4.4.4 The decisions of the Expert Group were translated into detailed operational instructions, user manuals and training material, which were issued to field offices for uniform implementation across the country. The market survey was mainly conducted during June 2023 to December, 2023 and further refinement was carried out in the first quarter of the 2024 as well.

4.4.5 The villages are selected as per the sampling methodology explained in para 4.3.1 above. Based on this design, an initial list of villages was prepared by PSD and circulated to the Field Operations Division (FOD) for verification. Field offices were instructed to physically verify each selected village to ascertain its continued existence as a rural unit, administrative status, accessibility for regular field visits, and presence of economic activity relevant to CPI price collection. Particular attention was paid to identifying villages that had undergone rapid urbanization, had been merged with nearby towns, or had been reclassified administratively. Villages that were found to be unsuitable for continued inclusion were proposed for substitution strictly in accordance with prescribed guidelines, ensuring that replacements belonged to the same stratum and maintained the representativeness of the sample.

All proposals for substitution of markets were centrally examined and approved by the PSD to maintain statistical integrity and uniformity. This verification exercise resulted in a finalized list of rural villages forming the foundation for subsequent stages of the Market Survey.

4.4.6 **Local Area concept for rural markets:** In rural areas, household consumption is characterized by spatial dispersion of purchase points. Households may procure different groups of goods from different locations, such as the village itself, nearby bigger villages/towns, weekly haats or periodic markets. To capture this reality, the concept of

local areas was adopted for the rural Market Survey. A local area represents a specific geographical location from which households purchase a particular group of items. For each village, field staff identified local areas through consultations with village heads and knowledgeable persons, focusing on actual purchasing behaviour of the majority of households. The number of local areas per village was restricted to a maximum of five, in order to balance representativeness with operational feasibility and to minimize the time and cost of price collection.

4.4.7 CPI sub-groups were mapped to these local areas based on the nature of items and prevailing purchasing practices. Multiple sub-groups could be mapped to the same local area, while care was taken to avoid unnecessary proliferation of local areas. This structured approach ensured realistic representation of rural consumption patterns and operational efficiency.

4.4.8 Similarly, field offices verified the administrative continuity of selected towns and the functioning of designated markets within them. Changes in urban boundaries, reclassification of towns, and shifts in commercial centres were carefully examined. This process ensured that CPI price collection under the revised series would be conducted only in active and relevant urban centres reflecting current consumption patterns. In the urban sector, markets within verified towns were centrally identified and allocated to field offices. These markets were selected to represent diverse socio-economic segments, including markets catering to high-income, middle-income and lower-income households. Unlike the rural sector, no identification of local areas was required in urban areas, as markets themselves served as the basic unit for price collection.

4.4.9 **Identification of Shops and Item–Shop Mapping:** Following identification of markets and local areas, the next stage of the market survey involved selection of shops for each CPI item. Field offices were instructed to identify shops that were most popular among consumers and from which the majority of purchases were made. The emphasis was on selecting shops with regular availability of items, significant volume of sales and stability over time.

4.4.10 For each CPI item, one original shop was initially identified during the market survey. Earlier, the identification of reserve shops was envisaged as a mechanism to ensure continuity in price collection in the event of temporary closure of shops, non-availability of items or other disruptions. Accordingly, detailed particulars of shops, including name, address, owner's name, contact number and prominent landmarks, were recorded to facilitate repeat visits and effective supervision. However, based on the recommendations of the International Monetary Fund (IMF) Technical Assistance Mission, the provision for pre-identification of reserve shops was subsequently discontinued. It was decided that, in the event of replacement of an original shop, a new shop would be identified from the selected market at that time, as pre-selected reserve shops may no longer remain the most popular or representative outlet due to fast changing market dynamics.

4.4.11 Items that were not available in any shop within the identified markets or local areas were explicitly marked as unavailable. This transparent recording of item availability prevented forced or artificial mapping and enhanced the credibility of the survey outcomes.

4.4.12 **Determination of Structured Product Descriptions (SPDs) or item specifications:**

Structured Product Descriptions (SPDs) is one of the most critical elements of CPI price collection. An SPD is a detailed description of the exact product or service whose price is to be collected every month. The fundamental objective of fixing SPDs is to ensure that prices compared over time relate to the *same product in terms of its price-determining characteristics*, so that the observed changes reflect pure price movement and not changes arising from quality, quantity, brand or specification shifts. The Expert Group emphasized that without rigorously defined SPDs, CPI compilation would be vulnerable to implicit quality substitution bias, especially in an environment characterized by rapid product innovation, frequent brand changes, promotional strategies and packaging variations.

4.4.13 Each SPD was fixed using a standard set of attributes, applied as relevant to the item category:

Variety: Refers to the specific type of the item (e.g., rice variety, vegetable type, fabric type). For items with significant seasonal or varietal price variation, multiple varieties were introduced as separate items.

Brand: Recorded where branded consumption dominates. In cases where unbranded consumption is prevalent, brand was either recorded as 'local' or omitted, as per guidelines.

Quality: Classified into three categories fine, medium and ordinary, based on prevailing trade practices and consumer perception.

Size / Model: Particularly relevant for clothing, footwear and consumer durables. Exact size, capacity or model number was recorded to avoid ambiguity.

Packaging: Whether the item is sold loose or packaged were also recorded.

Composition: Material or ingredient composition, especially important for textiles, edible oils and processed foods.

Unit and Quantity: A fixed unit and quantity were prescribed to ensure uniformity. In the case of packed goods, free extra quantity was explicitly excluded from the recorded quantity.

4.4.14 **Treatment of Special Cases:** Detailed instructions were provided for handling special situations:

- **Bundled Products**: Free items bundled with the main product were excluded from the specification.
- **Packed Goods with Extra Quantity**: Only the declared quantity was considered for pricing; free quantity was ignored.

- **Seasonal Items**: Separate items and SPDs were introduced for different seasonal varieties where price behaviour differed significantly.
- **Utilities**: Electricity and water charges were specified using fixed consumption slabs (e.g., 100, 200, 300, 400 units), reflecting billing practices.
- **Services**: For services such as airfare and house rent, specifications focused on service attributes rather than physical characteristics.

4.4.15 Ideal Cases and Illustrative Examples: To operationalize SPD concepts uniformly, a set of 'ideal cases' was prepared and circulated to all field offices. These ideal cases illustrated correct specification fixation for different categories of items, including food articles, packaged goods, clothing, consumer durables, utilities and services. The ideal cases served as reference templates during training programmes and field implementation. Field offices were instructed to align their SPD fixation with these ideal cases, deviating only where local consumption patterns clearly warranted such deviation, and to record reasons for deviation wherever necessary.

4.4.16 House Rent Survey: The Market Survey also encompassed a detailed house rent survey, recognising the significance of housing costs in household expenditure. In the revised CPI series, house rent coverage was expanded to rural areas for the first time, marking a major methodological enhancement. In rural areas, six rented dwellings were selected per village, while in urban areas twelve rented dwellings were selected per market. Stratification was carried out based on type of dwelling and number of living rooms, consistent with concepts used in recent NSS rounds. Total 19071 dwelling for house rent survey were selected for CPI 2024 series. Out of these, 15879 and 3202 dwelling were in urban and rural sectors respectively.

4.4.17 Timelines followed for Market Survey and base price collection

Table 4.10: Chronology of Market Survey for CPI 2024

Stage	Activity	Period
I	Expert Group deliberations and framework approval	2022–2023
II	Development of manuals, portals and training material	Mid-2023

Stage	Activity	Period
III	Zonal and regional training programmes	Mid–Late 2023
IV	Verification of villages and towns	Late 2023
V	Identification of markets, local areas and shops	Late 2023
VI	Fixation of SPDs and specialised modules	Late 2023
VII	Validation of market survey data and information	December 2023
VIII	Commencement of base price collection	January – December 2024

4.5 Base price collection

4.5.1 Base prices are collected to establish a stable and credible reference price for items included in the CPI basket. It serves as the benchmark for measuring price changes over time. The year in which the prices are collected for the first time in the CPI series is called as **"Base Year"**. Therefore, selection of normal and representative base year is of utmost importance. Further, use of Laspeyre's index for higher level index compilation also necessitates the base year closer to weight reference year, if not overlapping. Since, the latest available survey was HCES 2023-24 and it was decided to use this for item basket and weights determination of CPI 2024 series, in the fourth meeting of the EG, all members unanimously agreed to conduct the base price collection exercise for base revision of CPI from January, 2024 to December, 2024.

4.5.2 Accordingly, prices collected over this period were treated as base prices and the year 2024 was considered 'price reference year'. Base prices were collected for the entire base year to account for seasonal variations and price volatility in certain commodities, particularly food and fuel items. Thereafter, Field offices collected monthly prices of all the items throughout 2024. It was also ensured that there was no change in the specification of the items throughout 2024. The base prices were calculated for each item by taking geometric mean of the prices collected during January to December, 2024.

4.5.3 An equally important objective of base price collection was to reduce operational workload while improving overall data quality. Items exhibiting limited price variation or those subject to administered pricing by the Government, were identified at this stage.

These items were considered for centralized price collection with the use of available administrative and online data sources. This approach was adopted to improve data quality, to reduce field visits, and strengthens the price collection system. The base prices for these items are collected from their corresponding administrative/online data sources only. Details of data collected by State Regional Offices of FOD and Centrally by PSD are given as under;

4.5.3.1 **Price collection by State Capital Regional offices of FOD**:

- **Public Distribution System (PDS)** prices, also known as Fair Price Shop prices, were collected at State/UT level (through State Capital Regional Offices) in respect of fourteen items namely Rice, Wheat, Wheat atta, Sugar, Kerosene, Pulses, Salt, Edible oil, Bajra, Maize, Small millets, Barley, Ragi and Jowar. These were collected in respect of five groups of beneficiary households *viz*. Antyodaya Anna Yojana (AAY), Above Poverty Line (APL), Below Poverty Line (BPL), Priority Households (PHH) and State Food Security Scheme (SFSS). Information on items distributed free of cost or at subsidized rates were also collected.
- **Electricity charges:** Since the electricity rates charged by Distribution Companies (DISCOMs) are uniform in the area of its operation within the State / UT, electricity base prices at State/UT level (through State Capital Regional Offices) were collected from all the DISCOMs operational in that particular State/UT instead of collecting from each market.
- **Air fare charges:** The Directorate General of Civil Aviation (DGCA) provided a list of the most popular air routes, which was subsequently verified by the Field Operations Division (FOD). Base prices for these identified routes were collected at State/UT level (through State capital Regional Offices). Since airfares vary by booking platform and time slot, prices were compiled from well-known websites across different time windows to ensure representativeness. International fares is also included in the new CPI series.
- **Online/e-commerce markets:** 12 online markets were added across the towns having more than 25 lakh population as per census 2011. All items of CPI baskets

were mapped with the corresponding most popular e-commerce platform for price collection by the respective regional offices of FOD. Keeping in view the volatility of prices on e-commerce platforms, prices were collected in all four weeks on identified days and time slot.

4.5.3.2 Price collection by PSD, MoSPI: EG observed that prices of certain items like Fuel price, Rail fare, Postal charges are determined centrally by the Government. Further, it was also observed that the telecom and online media services are mainly provided by a few operators or service providers and prices/price changes are static across the country. In view of this, EG recommended to collect prices and compile indices of following items centrally by PSD;

- **Rail fare:** In CPI 2012, the Field Operations Division (FOD) offices across the country were gathering price data from railway stations and the IRCTC website. In consultation with the Ministry of Railways, PSD proposed for price collection of rail fare through Ministry of Railways in CPI 2024 series.
- **Fuel (Petrol, Diesel, LPG, PNG and CNG):** In CPI 2012, prices of these items were collected from fuel stations, situated in the vicinity of the elected markets, by the Field Operations Division (FOD) offices across the country. In CPI 2024, these data are provided by the Petroleum Planning and Analysis Cell (PPAC), Ministry of Petroleum and Natural Gas. The petrol and diesel data for all fuel stations of the country was provided by PPAC after collating the same from IOCL, BPCL and HPCL. LPG, CNG and PNG data was provided by PPAC for all City Gas Distributors (CGDs).
- **Postal charges (Money order & Speed Post):** The prices of Money Order, Postage Charges (Domestic), and Postage Charges (International), were collected from the India Post Department, as these services are administered in nature and uniform tariff rates are applicable across the country.
- **Telephone charges (Mobile & landline):** The price for both prepaid and post-paid services offered by the four major telecom operators, *viz.* BSNL, Jio, Vi and Airtel

were collected. While telecom plans vary across parameters such as validity, voice, data and SMS, it was observed during discussions with Telecom Regulatory Authority of India (TRAI) that most plans currently offer unlimited voice calls and standardized SMS (100 messages), with only marginal variations in data volumes. Further, telecom tariffs are largely uniform across telecom circles, particularly for Jio and Airtel, with only minor circle-level variations observed for Vi and BSNL. In view of this, the tariff and validity (in terms of number of days) alone be considered as the relevant variables for capturing price changes. The prices of one voice call plan, two plans with different validity period for pre-paid and two lowest tariff plans for post-paid were identified for each operator for collecting prices. The landline charges including broadband were selected for all four operators. Base prices were also collected for the same plans.

- **Online media service providers/streaming services:** Subscription rates of all online media service providers/service provider were largely identical across all regions. The prices were collected from the website of the following major OTT service providers: (i) Amazon Prime Video, (ii) Netflix, (iii) Jio Hotstar, (iv) SonyLIV, (v) YouTube Premium and (vi) ZEE5.

4.5.3.3 Base prices for the remaining items of the CPI 2024 basket were collected from traditional brick and mortar shops by the Field investigators of FOD every month. The markets under a particular Sub-regional office were equally distributed for operational convenience and for capturing price variations across the month in the region.

4.5.3.4 **House rent price collection:** In accordance with international practices, the owner-occupied dwellings were taken into account in the computation of housing index besides rented dwellings. The *'Rental Equivalent Approach'* was adopted to impute the rent of owner-occupied houses. The rent data were collected from the sample rented dwellings in each of the selected towns. For each quotation, twelve rented dwelling units were selected in the urban areas and six dwellings from rural markets. Rent data for both urban and rural houses were collected from the households. The dwellings were visited once in six months at least for data collection.

4.6 Index Compilation Methodology

In CPI compilation, the index is constructed in **two main stages**. First, **elementary indices** are computed at the lowest level using individual price observations. Second, these elementary indices are **aggregated to higher levels** using appropriate weights.

4.6.1 Elementary Index compilation

4.6.1.1 In the 2012 CPI series, the elementary index is compiled using the Jevons formula, which is the geometric mean of price relatives. In this method, the price relative for each item is calculated as the ratio of the current price to the base-period price. This approach is commonly referred to as the long index method. The long index method requires **Base-period prices** and **Current-period prices** for every price quotation. Since all price comparisons are made directly with the fixed base period, the base prices continue to play a central role throughout the life of the series. In simple mathematical terms, the elementary index under the long index method can be expressed as:

$$\textit{Elementary Index} = Jevon's\ Index = \textit{Geometric mean of (Current price} \div \textit{Base price)}$$

$$Jevon's\ Index = I_t = \prod \left(\frac{p_t^i}{p_0^i}\right)^{\frac{1}{n}} * 100$$

where: p_t^i =price of item i in month t

p_0^i= price of item i in the base period 0

n = number of price quotations

This formulation requires **base prices for all months** and is therefore called a **long index**.

This index can be expanded as follows;

$$I_t = \prod \left(\frac{p_t^i}{p_0^i}\right)^{\frac{1}{n}} \times 100$$

$$I_t = \prod \left(\frac{p_{t-1}^i}{p_0^i} \times \frac{p_t^i}{p_{t-1}^i} \right)^{\frac{1}{n}} \times 100$$

$$I_t = \prod \left(\frac{p_t^i}{p_{t-1}^i} \right)^{\frac{1}{n}} \times I_{t-1}$$

$$I_t = \prod \left(\frac{p_t^i}{p_{t-1}^i} \right)^{\frac{1}{n}} \times Index\ of\ previous\ month$$

I_t = Geometric Mean of $\frac{p_t^i}{p_{t-1}^i}$ * Previous month Index,

Where $\frac{p_t^i}{p_{t-1}^i}$ is the Price Relative with respect to the previous month.

This formulation does not require base-period prices for calculating index every month. Instead, the index is compiled using the current month's prices, the previous month's prices, and the previous month's index, and is therefore referred to as a *short index*.

4.6.1.2 The Benefits of Using Jevons Short Index for Elementary CPI Compilation are as follows

1. **No Base Price Dependence:** The short Jevons index requires only current-month prices, previous-month prices, and the prior index value, eliminating retention and repeated adjustments of base-period prices.
2. **Monthly Compilation Efficiency:** It measures month-to-month changes via geometric means of relatives and chains them forward, aligning perfectly with routine monthly CPI production workflows.
3. **Simplified Missing Prices:** Missing prices are imputed using prior-month movements and carried smoothly until new data arrives, without needing base-period reconstructions.

4. **Quality Changes and Replacements:** Item turnover is handled by matching comparable quotes across consecutive months only, avoiding complex quality adjustments tied to a distant base.
5. **Reduced Base-Year Bias:** Avoids distortion from fixed base-year prices or consumption patterns that become outdated over time.
6. **Numerical Stability:** Short-term relatives are smaller and less volatile than long-term base comparisons, minimizing impact from errors or extremes.
7. **Preserved Jevons Properties:** Retains geometric mean benefits, limits outlier influence, satisfies proportionality and time reversal tests.
8. **International Best Practice:** IMF CPI Manual endorses chained elementary indices like Jevons for flexibility; used by Statistics Canada and G-20 NSOs.
9. **Changing Samples Handling:** Needs only consecutive-month overlaps, allowing products to enter/exit dynamically while preserving data usability.

In view of the above advantages, EG recommended to adopt the **Jevons short (chain-base) index** for elementary index compilation in the proposed new CPI series in place of the Jevon's long index formula. It is simpler to implement, better suited for monthly compilation, and aligned with IMF-recommended international best practices.

4.6.2 Higher level Indices

4.6.2.1 There was no change proposed in the higher-level index compilation methodology in CPI 2024. In line with established practices, the **Young**/Modified Laspeyres' **index** was retained for higher-level aggregation in CPI 2024 as well. It combines price movements using **fixed expenditure weights** and ensures consistency and comparability over time. In the proposed CPI series, weights were derived from HCES 2023–24, which reflected household consumption patterns during that period, whereas base-period prices were collected for the year 2024. Since the expenditure weights and the base prices did not belong to the same period, the index was called a Modified Laspeyres' index or Young index. A Laspeyres' index requires both weights (expenditures) and base prices of the

same period, so that it measures the cost of purchasing the exact base-period consumption basket at current prices. This condition was not strictly met in the CPI 2024 and was also not practically feasible most of the times. The mathematical formulation of Laspeyres' index is as under;

$$I_t = (\Sigma\, p_t^i\, q_t^i) \,/\, (\Sigma\, p_0^i\, q_0^i) = \sum w_0^i \left(\frac{p_t^i}{p_0^i}\right)$$

where:
p_t^i = price of item i in period t
p_0^i = price of item i in the base period
q_0^i= quantity of item i in the base period

where $w_0^i = \frac{p_0^i \times q_0^i}{\sum_k p_0^k \times q_0^k}$

4.6.2.2 The Young index, on the other hand, is specifically designed for such situations. It allows the use of fixed weights from one period (HCES 2023–24) together with prices from a different base period (2024), while still maintaining a fixed-weight aggregation structure. This makes the Young index more practical and appropriate for CPI compilation, where household expenditure data and price reference periods are not updated simultaneously. The Mathematical formulation is as follows

$$Young's\ Index = \sum w_b^i \left(\frac{p_t^i}{p_0^i}\right)$$

Where:
p_t^i = price of item i in period t
p_0^i = price of item i in the base period
where $w_b^i = \frac{p_b^i \times q_b^i}{\sum_k p_b^k \times q_b^k}$ which is expenditure share of item i derived from HCES.

Here, b denotes the **weight reference period** (e.g., HCES 2023–24), which may differ from the price base period, which is for new series is 2024.

4.6.2.3 Therefore, in the present context, the Young index is preferred over the Laspeyres' index as it ensures methodological consistency, operational feasibility, and continuity

with the existing CPI series, while using the most recent available data on household consumption and prices. The Young index is also called "Modified Laspeyres' index".

4.6.2.4 In practice, higher-level CPI indices are compiled as the weighted arithmetic mean of item-level indices, using expenditure shares as weights. If w1 and w2 denote the expenditure weights, and I_1 and I_2 are the indices of items 1 and 2, respectively, the combined index is calculated as:

$$\text{Combined Index} = \frac{w_1 * I_1 + w_2 * I_2}{(w_1 + w_2)}$$

4.6.2.5 This approach is applied consistently in CPI calculations for aggregating item-level indices to higher levels such as subclass, class, groups, divisions and the overall index for state and All India as well as for combining rural and urban to generate combined index.

4.6.3 Compilation of indices for Weighted and Priced items

4.6.3.1 Weighted items are those for which expenditure data are available from HCES, while priced items are those for which prices are regularly collected for CPI compilation. In most cases of CPI 2024 series, weighted items and priced items were identical. However, in certain instances, HCES 2023-24 provided consolidated expenditure data for a group of items due to operational constraints in collecting detailed item-wise expenditure information from households.

4.6.3.2 For illustration, in the fruit's category, HCES collected expenditure data for the combined item "Pears/Nashpati". The expenditure reported under this item represented the total household expenditure on both fruits consumed during the reference period. Collecting separate expenditure data for each fruit was operationally difficult, as it would lengthen the survey schedule and increase the reporting burden on households. In contrast, in the market, these fruits were sold and purchased separately. Accordingly, while "Pears/Nashpati" appeared as a single weighted item in HCES, it was mapped

with multiple priced items in CPI price collection—namely, "Pears" and "Nashpati". This distinction between weighted items and priced items ensured that the CPI basket remains conceptually meaningful, while price collection continues to be operationally feasible and representative of actual consumption.

In such cases, elementary indices would be compiled separately for Pears and Nashpati. Since separate expenditure weights were not available for these priced items, the combined index for the weighted item "Pears/Nashpati" would be derived by taking the weighted arithmetic mean of the two elementary indices. Equal weights will be assigned to each priced item, as item-wise expenditure data were not available from HCES.

4.6.3.3 However, for administrative items such as "Rail fare" and "Electricity charges" etc, a single weighted item may correspond to multiple priced items. In such cases, priced item–wise weights are separately available from administrative data sources, such as number of passengers, revenue by fare category, or number of domestic users.

Accordingly, the weighted item index is derived from the individual priced item indices by applying a weighted arithmetic mean, using the available priced item–wise weights. These weights may not necessarily represent household expenditure directly, but were appropriate proxy weights based on administrative indicators such as passenger counts, usage levels, or revenue shares.

4.6.4 Treatment of Missing Prices

4.6.4.1 In the CPI 2012 series, prices missing due to temporary reasons were imputed on the assumption that the price change for the missing variety was same as the price changes of all varieties in the item group, or targeted similar ones. However, the prices were imputed for non-seasonal items and for one month only. These prices are not carried forward into the next month.

4.6.4.2 In cases where the prices of an item was missing in all markets, no price imputation was undertaken. Instead, the weights of the missing item are redistributed among the remaining items within the same section, subgroup, or group, as applicable, for further index compilation in CPI 2012. This practice of weight redistribution was leading to undue volatility in the index and affected the stability of the index movements over the periods.

4.6.4.3 The IMF recommends that missing prices be imputed by assuming that the price movement of the missing item is similar to the price movement of comparable items within the same elementary aggregate or higher-level aggregate. Accordingly, the imputed price for period t is obtained by applying an imputation factor derived from the observed price change of other available items in the same section, subgroup, or group, as applicable.

In practice, the imputation factor is calculated as the ratio of the index (or average price movement) of the group excluding the missing item in the current month to that of the previous month. The missing price is then estimated by multiplying the previous month's price of the item by this factor. The points further to be noted are as follows:

- Imputation should be transparent and rule-based.
- Imputation should continue in the subsequent months also if actual prices remain unavailable, and replace when actual prices reappear.
- Imputation should not be used for permanently missing or obsolete items, which should instead be replaced using appropriate linking or overlap methods.

This approach ensures continuity of the CPI, maintains comparability over time, and minimizes distortions arising from temporary price non-availability. Accordingly, in CPI 2024 series, all the missing prices would be imputed till the item reappears in the shop or market. The mathematical formulation for imputation of prices at elementary level is as follows:

$$\textbf{Imputed Price}_t = \textbf{Price}_{t-1} \times \textbf{Avg. of } \left(\frac{\textbf{Price}_t}{\textbf{Price}_{t-1}}\right)$$

4.6.4.4 For Administrative items in the new CPI, such as rail fares, electricity tariffs, Postal rates, fuel charges like petrol, diesel, LPG, PNG and CNG etc prices are often revised infrequently and uniformly across markets. Missing prices for such items may arise due to delays in notification, non-reporting, or timing differences in implementation, rather than market-related factors. Such cases occur very rarely in day-to-day price collection and compilation. However, it is necessary to make appropriate provisions for handling such rare scenarios in the CPI compilation process from the beginning of the series.

4.6.4.5 In line with the IMF guidelines, imputation for administrative items should reflect the regulated nature of price changes and avoid introducing artificial volatility. Accordingly, when prices of administrative items are temporarily unavailable, it is recommended that the last observed price be carried forward until an official price revision is notified and implemented. This approach assumes price constancy in the absence of a formal revision, which is consistent with the pricing mechanism of administrative items.

4.6.5 Regular Quality adjustment in CPI 2024

4.6.5.1 It often happens that a particular specification of an item becomes unpopular among consumers and disappears from the market, or that the selected outlet stops selling the specified product. In the former case, the item is substituted, while in the latter case, the shop is substituted. In some situations, both the item and the shop may need to be substituted. When a product permanently disappears from the market or is replaced by a new version with a different specification, the price statistician is required to undertake the following actions:

(a) **Selection of a replacement product:** A suitable replacement product should be selected that is as similar as possible to the original item in terms of characteristics, usage, and price-determining attributes, so as to maintain comparability.

(b) Quality adjustment of prices for differences in specifications Where the replacement product differs in quality or characteristics from the original item, an appropriate quality adjustment should be applied to isolate the pure price change from the quality difference. This ensures that the resulting price movement reflects only price change and not quality change.

4.6.5.2 Under the proposed chain-base (Jevons short index) framework, when a product permanently disappears or is replaced by a new version with different specifications, the following steps are required to ensure continuity and comparability of the index:

(a) **Selection of a replacement item or outlet**. A replacement item and/or outlet should be selected such that it is as close as possible to the original in terms of characteristics, usage, and price-determining attributes, so that the observed price movement remains representative.

(b) **Ensuring price comparability through overlap pricing**. Since the chain-base method relies on month-to-month price relatives rather than fixed base prices, it is essential that the current month and previous month prices refer to the same specifications. Accordingly, in the month of substitution, prices of both the old and the new specifications should be collected wherever feasible (overlap period). The price of the old specification for the previous month will be used for index compilation in the month of change, thereby maintaining comparability. This approach is mainly feasible in the case of house rent and administrative items, as the collection of previous month's prices is clearly possible without any loss of data quality.

(c) **Treatment in absence of overlap prices.** If the price of the old specification is not available in the month of substitution, the missing price should be imputed for that

month using the prescribed imputation method. From the subsequent month onwards, once at least two consecutive months' prices of the new specification are available, the new specification will be fully incorporated into the index compilation. In the Indian context, where a large proportion of retail outlets operate in the unorganised sector, collection of previous months or older prices is generally not feasible. Even where such information is reported, the reliability and quality of the data may be doubtful. For instance, obtaining accurate prices of vegetables for the exact same date in the previous month is often not possible. Therefore, this method will be adopted for most items in the CPI basket.

This approach avoids the need for explicit base-price quality adjustment, which is required in fixed-base methods, and ensures that pure price change is measured without introducing artificial jumps in the index. The procedure is fully consistent with the principles of the IMF CPI Manual (2020) and supports a smooth, stable, and operationally feasible implementation of the chain-base CPI.

4.6.6 Practical examples of index compilation during various scenarios are illustrated in the following examples.

Example 1: Compilation of item Index when all the prices are available.

Sl No	Item Name	Item specification	Size (in grams)	P_{t-1}	P_t	PR
1	Biscuit	Parle-G Glucose	800	96	100	1.0417
2	Biscuit	Britannia Marie Gold	263	91	91	1
3	Biscuit	Parle Fab Bourbon (Chocolate Cream)	450	83	83	1
4	Biscuit	Britannia Treat Jim Jam	138	40	40	1
5	Biscuit	McVitie's Digestive	200	150	150	1
			Geometric Mean			**1.0082**
			Index for item Biscuit			**100.8198**

- P_t Price for the period t
- PR is the Price relative = P_t/P_{t-1}

- In the above table, the previous month index is assumed to be 100. Further, the index for the base period (i.e., I_0) will always be set to 100 for all items.
- **All values are rounded to 4 digits after decimal**

Example 2: Compilation of item Index when prices are Missing

Let us assume that the price from the market 3 (Sl no 3) is missing in the current month t. The index will be compiled using the **imputed price** of that item.

Sl No	Item Name	Item specification	Size (in gram)	P_{t-1}	P_t	PR	Imputed P(t)	Revised PR
1	Biscuit	Parle-G Glucose	800	96	100	1.0417		1.0417
2	Biscuit	Britannia Marie Gold	263	91	91	1		1
3	Biscuit	Parle Fab Bourbon (Chocolate Cream)	450	83			**83.8514**	**1.0103**
4	Biscuit	Britannia Treat Jim Jam	138	40	40	1		1
5	Biscuit	McVitie's Digestive	200	150	150	1		1
			Geometric Mean			**1.0103**		**1.0103**
			Index for item Biscuit					**101.0258**

Imputed Price= P_{t-1}* GM of available PRs. The imputation factor here is the GM of available PRs of that state * sector

Example 3: Compilation of item Index when there is Specification change but prices for overlapping period is available.

In Example 1, assume that from market 5 (Sl. no. 5), the old specification (McVitie's Digestive) becomes unavailable and gets replaced with Britannia Good Day biscuit during period t. Since prices for the new variety are available and collectible from both the current month and previous month, the old specification price for this market is not considered; instead, the price relative (PR) is calculated using only the current-month and previous-month prices of the **new specification**.

Sl No	Item Name	Item specification	Size (in gram)	P_{t-1}	P_t	PR	Remarks
1	Biscuit	Parle-G Glucose	800	96	100	1.0417	
2	Biscuit	Britannia Marie Gold	263	91	91	1	
3	Biscuit	Parle Fab Bourbon (Chocolate Cream)	450	83	83	1	
4	Biscuit	Britannia Treat Jim Jam	138	40	40	1	
5	**Biscuit**	**McVitie's Digestive**	**200**	**150**			Prices will not be considered hence forth
5		**Britannia Good Day Oat**	200	**100**	**105**	**1.05**	Prices will be used from this month onwards
			Geometric Mean			**1.0181**	
			Index for item Biscuit			**101.8084**	

Example 4: Compilation of item Index when there is Specification change but prices for overlapping period is not available.

In the above example, assume that from market 5 (Sl. no. 5), the old specification (McVitie's Digestive) is unavailable and gets replaced with Britannia Good Day biscuit during period "t". In this case, the price of the new variety is available only from the current month onwards (with no previous-month price available). In this situation the price relative (PR) is calculated using the **imputed price** of the old specification and its corresponding previous-month price. The new specification values will be used from the next month onwards, once both current-month and previous-month prices become available.

Sl No	Item Name	Item specification	Size (in gram)	P_{t-1}	P_t	PR	Imputed price	Revised PR	Remark
1	Biscuit	Parle-G Glucose	800	96	100	1.0417		1.0417	
2	Biscuit	Britannia Marie Gold	263	91	91	1		1	
3	Biscuit	Parle Fab Bourbon (Chocolate Cream)	450	83	83	1		1	
4	Biscuit	Britannia Treat Jim Jam	138	40	40	1		1	
5	**Biscuit**	**McVitie's Digestive**	**200**	**150**			**151.5387**	1.0103	Imputed price of old specification will be used this month for PR calculation
5		**Britannia Good Day Oat**	200		**105**				Next month onwards prices of new specification will be used
			Geometric Mean			**1.0103**		**1.0103**	
			Index for item Biscuit					**101.0258**	

4.6.7 Treatment of Free Items in the New CPI Series

4.6.7.1 Extensive deliberations were held on the treatment of free social transfers, particularly items distributed through the Public Distribution System (PDS), in the compilation of the new CPI series. Further, MoSPI has placed a discussion paper also in

public domain regarding the treatment of free PDS items in the CPI with a comprehensive methodology. Discussion paper is placed at Annexure 5.4. EG noted that the Consumer Price Index (CPI) is primarily a macroeconomic and monetary policy indicator, intended to measure changes in prices actually paid by households, and not the value of government welfare transfers.

4.6.7.2 Free social transfers represent government transfers to households rather than household market purchases, and therefore fall outside the conceptual scope of CPI. This treatment is distinct from items such as own-consumption of home-produced food or owner-occupied housing, which arise from household production or ownership and are conceptually included in CPI.

4.6.7.3 International experience shows that many countries exclude free or fully subsidized goods and services from their CPI baskets despite substantial public expenditure on such items. For example, Brazil excludes free food distributions from CPI and Advanced economies exclude free public education and healthcare services from CPI compilation.

4.6.7.4 It was also discussed that any indirect impact of free supply on market prices (e.g., downward pressure on prices) is captured through observed market transaction prices. IMF Consumer Price Index Manual, 2020 also states that the CPI is designed to measure changes over time in the prices paid by households for goods and services consumed. Accordingly, only items for which households incur monetary expenditure are included in the CPI basket.

4.6.7.5 However, where a good or service is partly subsidized and households pay a positive price, the price actually paid should be used for CPI compilation. If free provision is discontinued and households begin purchasing the item at market prices, such items may enter the CPI basket through normal basket revision

4.6.7.6 Therefore, in case of free social transfers - such as food grains distributed free of cost under PDS, free electricity up to a specified limit, free education, free healthcare services, or other goods and services provided without charge, which do not involve a transaction price paid by households, since no observable price exists, such items cannot be directly priced and therefore do not enter CPI price compilation. In view of the above, the following treatment will be adopted in the new CPI 2024 series:

a. **Free social transfers will not be included in CPI compilation.**
b. Items for which household expenditure becomes zero due to free provision will be excluded from the CPI basket.
c. Items for which base prices become zero due to free provision, even if HCES reports expenditure, will not form part of the CPI 2024 basket.
d. If an item currently has positive expenditure and prices, but its price becomes zero in future due to free provision, the zero price will not be used for index compilation; instead, the price will be treated as missing and imputed using the prescribed missing-price imputation methodology.

4.6.7.7 Free PDS items which are excluded from the CPI compilation, become priced, it will not be reflected in the CPI 2024 series. Decision on the same will be taken during the next base updation.

4.6.8 House rent Index

4.6.8.1 The Housing expenditure/rent is a crucial indicator of the overall well-being of the households not only in India but across the world as a significant amount of their income is spent either on house rent or maintaining an owned house. It is considered an important factor for the economy as it affects household budgets and influences the construction and real estate sectors. Therefore, inflation based on house rent index is an important tool not only for the policy and decision makers but also for the households.

MoSPI published a discussion paper on 30th October, 2025 with elaborate revised Housing index calculation methodology. Same is placed at Annexure 5.5.

In India, one of the key components of the existing CPI series is housing as it has 21.67% expenditure share for urban areas and 10.07% expenditure share at All India level in the existing CPI series. Currently, the housing index is not compiled in the rural sector mainly because Consumer Expenditure Survey (CES) 2011-12 did not provide the estimates of the imputed rent for owner occupied houses for this sector. Further, as per CES (2011-12), the actual house rent expenditure accounted for only 0.44% of the total rural consumption expenditure. Further, the rental equivalent approach also could not be adopted due to non-availability of rent market.

4.6.8.2 In CPI 2024 series, the methodology for compiling the House Rent Index was comprehensively revised to enhance robustness, consistency, and representativeness. The revised approach addresses concerns raised by users and experts regarding panel bias, volatility, coverage limitations, and distortions arising from employer-provided dwellings. Changes in the data collection and compilation approach are summarised as under;

a) In the new series, visit to the dwellings by the enumerator has been planned in such a way that, rent data will be available for every month. All the dwelling are distributed among 6 months and enumerator would necessarily visit each dwelling every six months. In addition, while visiting a dwelling an additional information will be collected from the respondent about the next expected date of rent revision and will flag the dwelling. Generally there is formal or informal agreement between the owner and the tenants about the period after which the rent is to be revised. If the month in which the revision in the rent is expected, falls between the two scheduled visits, the enumerator will visit the dwelling in that month also to collect the revised rent. Thus, in a month in addition to 1/6th of the dwellings additional number of dwellings which have been flagged by the enumerators will be covered. This approach would ensure that monthly data that is

captured would accurately reflect changes and also reduce the need for mandatory monthly visits by the enumerator. This change addresses representativeness issues inherent in panel-based systems, particularly in markets with limited availability of rented dwellings outside major urban centres.

b) **Inclusion of Rural Sector:** The Housing Index will be compiled for both rural and urban sectors, leveraging house rent and imputed rent data available from HCES 2023–24. This marks a departure from the current series, which covers only urban areas due to the absence of rural rent data in HCES 2011–12.

c) In urban markets, rent data will be collected from up to 12 dwellings per market, subject to availability. In rural areas, data will be collected from up to 6 dwellings per selected village, based on availability of rented units.

d) To avoid distortions arising from concessional rents or administrative adjustments unrelated to market conditions, government and employer-provided dwellings are excluded from the Housing Index, as these do not reflect market-based rental transactions.

e) Dwellings were classified into four categories based on the number of living rooms (1, 2, 3, and 4 or more). Category-wise weights were derived from Census 2011, replacing the Housing Condition Survey (NSS 69th Round) used in the existing series.

f) **Compilation Methodology:** Housing categories are treated as priced items, and indices are compiled category-wise at the State × Sector level. Monthly rent relatives were computed as the geometric mean of rent relatives within each category and state. Category-wise indices are compiled using a chain-base (short-term Jevons) index, where the current month index is obtained by multiplying the rent relative with the previous month's index. Separate indices are derived for rented and owner-occupied dwellings. For owner-occupied dwellings, the rental equivalence approach has been applied by using rent indices of corresponding dwelling categories, as no rents are directly collected

from owner-occupied households. Category-wise indices are aggregated using weighted arithmetic means, with weights based on category shares for rented dwelling and owner-occupied dwellings.

g) The overall State-level House Rent Indices are obtained by aggregating rented and owner-occupied indices using expenditure shares derived from HCES 2023–24. The proposed revisions aim to produce a more stable and representative Housing Index in the new CPI series.

4.6.9 PDS items

4.6.9.1 Each PDS item is categorised into 5 priced items based on the type of ration card held, namely APL, BPL, AAY, SFSS and PHH. Items for which category-wise weights are not available in HCES, or which were either not distributed during the base year (2024) or were distributed free of cost, shall be excluded from the CPI basket for the entire duration of the series. Under the proposed methodology, indices shall first be compiled at the category level using price relatives, defined as the ratio of the current month price (Pt) to the previous month price (Pt-1), and applied to the corresponding category index of the previous month. Same prices will be used for both urban and Rural sectors since PDS prices are same for a particular state. The final PDS Index shall thereafter be compiled separately for Rural and Urban sectors by aggregating the category indices using sector-specific consumption weights derived from HCES data through a weighted arithmetic mean.

4.6.9.2 In cases where the current price is reported as zero due to free distribution or is missing, prices shall be imputed by applying the overall price movement observed in other PDS categories. If prices for all categories are missing in a particular month, then the previous month prices will be carried forward as imputed price to maintain continuity of the index.

4.6.10 **Rail fare Index**

4.6.10.1 The Ministry of Railways provided slab-wise, train-wise and seat-wise passenger volume data for the year 2023–24, which was examined by the Price Statistics Division (PSD) to finalise the methodology for compilation of the CPI Rail Fare Index. Rail fares are administratively determined, and the pricing structure is uniform across States, with no State- or sector-specific variation. Accordingly, PSD proposed to compile a single all-India Rail Fare Index, which would be applied uniformly across all States and sectors for CPI compilation. The passenger volume data was utilised to derive revenue-based weights for different train types, classes and distance slabs by estimating slab-wise revenue as the product of passenger volume and the fare applicable to the maximum distance within each slab. Based on these revenue estimates, distance slabs were rationalised, and representative distances were finalised for price collection across Mail/Express, Rajdhani/Duronto, Shatabdi/Vande Bharat/Tejas and UTS (Suburban and Non-Suburban) services.

4.6.10.2 Using the finalised slab structure and revenue-based weights, slab-wise (treating as priced item) indices are compiled using the price relative and previous month corresponding indices. The rail fare index for the current month will be calculated as a weighted average of slab-wise indices using revenue-based weights.

4.6.10.3 In cases where current month prices are missing for some cases, a restricted weighted index will be computed by excluding the missing slabs; the ratio of the current to the previous restricted indices will be used as an imputation factor to calculate imputed prices to ensure continuity of the index. If prices for all slabs are missing in a given month, the previous month prices shall be carried forward, as rail fares are administratively determined items.

4.6.10.4 The train types, classes and distance slabs considered for compilation of rail fare index are given below.

Train	Class/Coach	Slab (Kms)	Representative distance for Price (Kms)
Mail Express	1AC	1-600	300
Mail Express	1AC	601-1000	800
Mail Express	1AC	1001-1500	1250
Mail Express	1AC	1501-2000	1750
Mail Express	1AC	Above 2000	2500
Mail Express	2AC	1-600	300
Mail Express	2AC	601-1000	800
Mail Express	2AC	1001-1500	1250
Mail Express	2AC	1501-2000	1750
Mail Express	2AC	Above 2000	2500
Mail Express	3AC	1-600	300
Mail Express	3AC	601-1000	800
Mail Express	3AC	1001-1500	1250
Mail Express	3AC	1501-2000	1750
Mail Express	3AC	Above 2000	2500
Mail Express	Sleeper	1-600	300
Mail Express	Sleeper	601-1000	800
Mail Express	Sleeper	1001-1500	1250
Mail Express	Sleeper	1501-2000	1750
Mail Express	Sleeper	Above 2000	2500
Mail Express	CC	1-300	200
Mail Express	CC	301-500	400
Mail Express	CC	Above 500	800
Mail Express	2S+VS	1-300	200
Mail Express	2S+VS	301-500	400
Mail Express	2S+VS	Above 500	800
Mail Express	EC+EA+EV	1-1000	800
Shatabdi/Vande Bharat/Tejas	EC	1-300	200
Shatabdi/Vande Bharat/Tejas	EC	301-500	400
Shatabdi/Vande Bharat/Tejas	EC	Above 500	800
Shatabdi/Vande Bharat/Tejas	CC	1-300	200
Shatabdi/Vande Bharat/Tejas	CC	301-500	400
Shatabdi/Vande Bharat/Tejas	CC	Above 500	800
Rajdhani/Duronto	1AC	1-600	300
Rajdhani/Duronto	1AC	601-1000	800

Train	Class/Coach	Slab (Kms)	Representative distance for Price (Kms)
Rajdhani/Duronto	1AC	1001-1500	1250
Rajdhani/Duronto	1AC	1501-2000	1750
Rajdhani/Duronto	1AC	Above 2000	2500
Rajdhani/Duronto	2AC	1-600	300
Rajdhani/Duronto	2AC	601-1000	800
Rajdhani/Duronto	2AC	1001-1500	1250
Rajdhani/Duronto	2AC	1501-2000	1750
Rajdhani/Duronto	2AC	Above 2000	2500
Rajdhani/Duronto	3AC	1-600	300
Rajdhani/Duronto	3AC	601-1000	800
Rajdhani/Duronto	3AC	1001-1500	1250
Rajdhani/Duronto	3AC	1501-2000	1750
Rajdhani/Duronto	3AC	Above 2000	2500
Rajdhani/Duronto	Sleeper	1-600	300
Rajdhani/Duronto	Sleeper	601-1000	800
Rajdhani/Duronto	Sleeper	1001-1500	1250
Rajdhani/Duronto	Sleeper	1501-2000	1750
Rajdhani/Duronto	Sleeper	Above 2000	2500
UTS Non-Suburban	N/A	1-100	50
UTS Non-Suburban	N/A	101-200	150
UTS Non-Suburban	N/A	201-300	250
UTS Non-Suburban	N/A	301-1000	700
UTS Non-Suburban	N/A	Above 1000	1500
UTS Suburban	N/A	below 50	25
UTS Suburban	N/A	51-100	75
UTS Suburban	N/A	Above 100	125

4.6.10.5 Metro fares

Metro fares is a priced item under the weighted item "Rail fare." It may be noted that separate expenditure data for Metro services were not available in HCES 2023-24. Metro rail systems are absent in several States, while in most other States they are at an early stage of operation, except in Delhi where Metro services are well established. Accordingly, EG recommended to consider Metro fares as a priced item only for the State

of Delhi. For compilation of the weighted item "Rail fare," equal weights shall be assigned to Rail fares and Metro fares.

4.6.11 Postage, couriers and money order

4.6.11.1 The weighted item "*Postage, couriers and money order*" comprises four priced items, namely: (i) Money Order, (ii) Postage Charges – Domestic, (iii) Postage Charges – International, and (iv) Courier Charges (other than India Post). For the three priced items vis Money Order, Postage Charges (Domestic), and Postage Charges (International), a single all-India index shall be compiled using tariff rates notified by the Department of Posts as these services are administered in nature and uniform rates are applicable across the country. In the case of Courier Charges (other than India Post), prices shall be collected from the selected market and used for index compilation.

4.6.11.2 Each of the four priced items shall be assigned equal weights within the Postal Services group, as separate expenditure or revenue data were not available in HCES. Item-wise indices shall be compiled using the standard CPI methodology by computing price relatives with respect to the previous month and applying these to the corresponding previous month indices.

4.6.11.3 In cases where price quotations are missing for any item, appropriate imputation shall be carried out using the price movements observed in the available prices for that item. Further, in rare circumstances where prices for all three items sourced from India Post are unavailable in a given month, the previous month's prices shall be carried forward, in line with the treatment adopted for administered items.

4.6.12 Online Media Service Provider / Streaming Services

4.6.12.1 Against the weighted item "*Online Media Service Provider / Streaming Services*", a single all-India index will be compiled and applied it uniformly across all States and sectors, as subscription rates are largely uniform across regions. It is observed that a

limited number of platforms account for a significant share of subscribers; accordingly, prices shall be collected from major OTT service providers, *viz.* Amazon Prime Video, Netflix, Jio Hotstar, SonyLIV, YouTube (premium) and ZEE5. For each platform, two price quotations (if available) corresponding to the base subscription plans with a validity of one month shall be collected; where a one-month plan is not available, the nearest available subscription plan shall be considered for price collection.

4.6.12.2 In view of the non-availability of reliable subscriber-wise weights, it is proposed to compile a single index by treating each OTT platform as a separate specification. Price relatives shall be computed for each platform, and the geometric mean of these price relatives shall be applied to the previous month's index to obtain the current month's index. In cases where price quotations are missing for any platform, appropriate imputation shall be carried out using the price movements observed in the available prices. If prices for all platforms are unavailable in a given month, the previous month's prices shall be carried forward to ensure continuity of the index, in line with the treatment followed for administered items.

4.6.13 Electricity

4.6.13.1 Electricity constitutes an essential component of household consumption and has a significant influence on the overall price level. In view of the evolving tariff structures across States and Distribution Companies (DISCOMs), and in line with the Committee's decision not to consider free social transfers in CPI, free electricity slabs will not be considered in CPI 2024. A dedicated Electricity Price Index was proposed to be compiled to systematically capture movements in electricity prices and reflect them appropriately in price indices.

4.6.13.2 The Electricity Price Index shall be compiled using monthly electricity tariff information for domestic consumers across defined consumption slabs, *vis*. the first 100 units, 200 units, 300 units and 400 units for each DISCOMs available in a particular state.

The total bill amount for each slab including the applicable meter charges and other fixed charges levied from the customers shall be used directly for index compilation. This information will be collected only from the State Capital Regional Offices (ROs), unlike the CPI 2012 series where rates were collected from each selected market. For each DISCOM-wise slab at the State × Sector level, price relatives shall be computed as the ratio of the current month bill amount to that of the previous month and applied to the corresponding previous month indices to derive DISCOM/Slab-wise indices. These indices shall then be aggregated using a weighted arithmetic mean to obtain the Electricity Price Index for the respective State × Sector, with weights based on slab-wise domestic consumer distribution data furnished by the Central Electricity Regulatory Commission (CERC) for the year 2024.

4.6.13.3 In cases where the price of a slab is reported as zero due to free distribution or is missing, prices shall be imputed using the price movements observed in other available slabs. However, where no positive price is available for any DISCOM-wise slab within a given State × Sector, the previous month's prices shall be carried forward, as electricity tariffs are administratively determined and generally remain unchanged within short intervals.

4.6.14 Telephone Charges Index

4.6.14.1 There are two weighted items under telephone charges, namely *Telephone charges: mobile* and *Telephone charges: landline*. PSD proposed to compile the Telephone Charges: Mobile Index using both prepaid and post-paid plans offered by the four major telecom service providers—BSNL, Jio, Vi and Airtel. Discussions with the Telecom Regulatory Authority of India (TRAI) indicated that most current plans offer unlimited voice calls and standardized SMS facilities, with only marginal variations in data volumes. Further, telecom tariffs are largely uniform across telecom circles, particularly for Jio and Airtel, with limited circle-level variation for Vi and BSNL. In view of the increasing focus of operators on Average Revenue Per User (ARPU), it was proposed that **tariff and validity**

(number of days) alone be considered as the relevant parameters for capturing price changes in telephone services.

4.6.14.2 The Expert Group recommended that the index be compiled by converting the selected plans into per-day prices and computing price relatives with respect to the previous month. In cases where a selected plan is discontinued, the next available lowest plan shall be considered after conversion into a per-day price. Thereafter, operator-wise indices shall be compiled using the regular method by taking the product of the geometric mean of price relatives with the corresponding index of the previous month. The Telephone Charges Index shall then be obtained as a weighted average of the operator-wise indices, with weights based on subscriber numbers for the year 2023–24, as reported in the latest Annual Report of TRAI, which provides Licensed Service Area (LSA)-wise subscriber figures. The same weights shall be applied to all States falling within a given LSA. Wherever tariffs are available at the State level, such tariffs shall be used for index compilation; otherwise, LSA-level tariffs shall be adopted.

4.6.14.3 For prepaid services, one voice-only plan and two data plans per operator shall be considered, while for post-paid services, two lowest-tariff plans per operator shall be selected. The indices for prepaid and post-paid services shall be combined using State-wise market shares as per the TRAI Annual Report to derive the index for *Telephone charges: mobile*. The index for *Telephone charges: landline* shall be compiled using a similar approach based on tariff and validity. In cases where prices are missing or reported as zero due to free provision, imputation shall be carried out using the price movements observed in available plans. If prices for all selected plans under an item are unavailable, imputation shall be done based on the price movement of the corresponding sub-class, and in rare circumstances where prices for both weighted items are unavailable, the previous month's prices shall be carried forward to ensure continuity of the index.

4.6.15 Petrol, Diesel, LPG, CNG and PNG.

4.6.15.1 In CPI 2012 series, prices of petrol, diesel, LPG, PNG and CNG were collected from selected fuel stations by the Field Operations Division (FOD). In order to strengthen coverage, improve consistency, and streamline the data collection mechanism, it was proposed to compile fuel price indices using administrative data sources collected centrally in place of selective market quotations. The Petroleum Planning and Analysis Cell (PPAC), Ministry of Petroleum and Natural Gas, shall provide monthly fuel price data for petrol, diesel, LPG, PNG and CNG with reference to prices prevailing on the 15th of the reference month.

4.6.15.2 Under the proposed approach, monthly price data for unbranded petrol and diesel shall be obtained for all Retail Selling Points (RSPs) of Public Sector Undertakings, covering approximately 90,000 outlets across the country, with prices compiled separately for Urban and Rural sectors. Prices of private sector outlets were not proposed to be considered, as their share in total fuel sales volume was relatively small. For LPG, monthly price data shall pertain to the domestic non-subsidized 14.2 kg cylinder, covering all distributors operated by public sector oil marketing companies. Smaller cylinders of 5 kg and 10 kg capacity were not proposed to be included, as their sales share is minimal and their prices generally move in line with the 14.2 kg cylinder.

4.6.15.3 Price data for CNG and PNG shall be sourced from City Gas Distribution (CGD) entities authorized by the Petroleum and Natural Gas Regulatory Board (PNGRB), covering all available distributors across the country. CNG prices shall be obtained in terms of Indian Rupees (₹) per kg and PNG (Domestic) prices in terms of ₹ per standard cubic metre (SCM). All fuel price data shall be made available on a monthly basis in electronic format, along with historical monthly price data from January 2024 onwards, to support continuity of the index series.

4.6.15.4 Using the above administrative data, the EG recommended that item-wise indices for petrol, diesel, LPG, CNG and PNG shall be compiled at the State and sector levels

following the standard CPI methodology. Price relatives shall be computed by comparing current month prices with those of the previous month, and indices shall be derived by applying the geometric mean of price relatives to the corresponding previous month indices. Since the proposed methodology was based on near-complete enumeration rather than selective price collection, it was expected to enhance the robustness, representativeness and overall quality of fuel price indices in the CPI.

4.7 Data Dissemination Structure

4.7.1 The Consumer Price Index (CPI) is a key macroeconomic indicator used for measuring inflation and supporting policy formulation. Timely, transparent, and comprehensive dissemination of CPI indices is essential for informed decision-making, effective inflation monitoring, and robust economic analysis. A well-defined dissemination framework will ensure credibility, uniform access to official statistics, and will enhance the relevance and reliability of CPI as a core indicator of price movements in the economy. Accordingly, EG recommended the dissemination strategy for CPI 2024 to meet the needs of its users, RBI, policymakers, analysts, and the general public while maintaining statistical transparency and consistency.

4.7.2 In the Sixth Expert Group Meeting, it was decided that granularity in CPI dissemination should be enhanced. Accordingly, the EG recommended that State-level CPI indices should be released separately for Rural and Urban areas in the revised series. To ensure proper understanding of the data, it was also suggested that explanatory notes should be issued along with the releases. Further, the EG recommended that All-India item-level indices should be disseminated separately for Rural, Urban and Combined sectors, instead of releasing only Combined indices as in the existing series.

4.7.3 In the Eighth Expert Group Meeting, the EG discussed the classification system to be followed in the revised CPI series and decided to adopt the Classification of Individual Consumption According to Purpose (COICOP) 2018, to the extent feasible. This decision

was taken to align the CPI framework with international standards and improve comparability.

4.7.4 During the Eleventh Expert Group Meeting, the EG considered the level of geographical details in CPI 2024 dissemination. It was decided that detailed CPI indices would be released at the State level by the National Statistical Office (NSO). However, the EG noted that the compilation and release of CPI indices at the district level is not feasible at present due to limitations of sample size and resources. It was observed that district-level CPI would require a much larger household expenditure sample and expanded data collection, and that indices prepared with the existing sample would not be statistically reliable.

4.7.5 In the Twelfth Expert Group Meeting, EG Members were informed of the proposed dissemination plan for the revised CPI series. It was decided that item-level CPI indices would be released for each State and sector. Further, dissemination would cover all COICOP levels, namely Divisions, Groups, Classes, Sub-classes and Items, for both State-wise and sector-wise (Rural, Urban and Combined).

4.7.6 Release Schedule of CPI: The CPI 2024 will be released on a monthly basis at 04:00 p.m. on the 12th day of the following month. In case, when the 12th day is a holiday, the CPI will be released on the next working day. Advance Release Calendar will be prepared accordingly. This fixed and pre-announced release schedule will ensure predictability, transparency, and equal access to CPI data for all users.

4.7.7 Release of Back Series

In order to establish the connectivity between CPI 2012 and CPI 2024 series, the EG recommended to release the linking factor of All India combined, rural and urban level with the first release of CPI 2024. Thereafter, detailed back series should be developed after detailed deliberations. Since COICOP 2018 classification system was adopted in CPI 2024 series, linking factor should be calculated till the level it can be linked.

Formula for CPI Linking Factor (Annual Overlapping):

Let

$\mathbf{Avg}I_y^{new}$:denote the annual average CPI of the new series for the overlapping year y;

$\boldsymbol{AvgI_y^{old}}$: denote the annual average CPI of the old series for the same overlapping year y.

The Linking Factor (LF) is given by:

$$\text{LF} = \frac{AvgI_y^{new}}{AvgI_y^{old}}$$

The linked CPI for the earlier month t is obtained as:

$$I_t^{linked} = I_t^{old} \times \text{LF} \quad \text{(where month } t \text{ implies earlier period than } y\text{)}$$

This method ensures continuity of the CPI series by linking the old base series with the new base series using the annual overlapping year. The annual overlapping period for this series will be the year 2025.

4.7.8 Modes of Dissemination

- **Press Note**

The CPI indices will be disseminated through an official Press Note, which will provide comprehensive information at the item level for each State/Union Territory and sector (Rural, Urban, and Combined). The Press Note will cover all levels of COICOP classification, namely Divisions, Groups, Classes and Sub-classes for both State-wise and sector-wise breakdowns. This will serve as the primary and authentic source of CPI information for the public domain. The first CPI 2024 press note will also have details on key changes in the new series.

- **Digital Dissemination Platforms**

In addition to the Press Note, the item wise CPI indices and corresponding inflation rates for All India and States for both rural and urban sectors will be disseminated through digital platforms to facilitate wider access and advanced analysis. These include:

- ✓ The official website of the Ministry of Statistics and Programme Implementation (MoSPI)(www.mospi.gov.in) for Press Release
- ✓ The eSankhyiki portal (https://esankhyiki.mospi.gov.in) for granular data

*****

Chapter 5

Annexures

S.N.	Annexure Name	Page no.
5.1	Number of weighted items (State and sector wise)	81
5.2	CPI 2024 structure as per COICOP 2018	82-107
5.3	5.3a – All India Division wise weights 5.3b – All India Group wise weights 5.3c – State Wise Sector Wise Weights 5.3d – All India and State wise item level weights *	108-112
5.4	Discussion paper on treatment of free PDS items in CPI	113-125
5.5	Discussion paper on the proposed changes in the Housing index compilation methodology	126-137
5.6	Minutes of the meetings	138-252

***Annexure 5.3d can be downloaded on clicking this link**

Annexure 5.1

Number of Weighted Items (State and Sector Wise)				
State Code	**State Name**	**Rural**	**Urban**	**Combined**
01	Jammu And Kashmir	340	341	344
02	Himachal Pradesh	346	347	349
03	Punjab	304	332	335
04	Chandigarh		322	322
05	Uttarakhand	335	339	342
06	Haryana	318	328	330
07	NCT of Delhi	280	303	311
08	Rajasthan	338	340	344
09	Uttar Pradesh	348	349	349
10	Bihar	342	336	344
11	Sikkim	343	345	345
12	Arunachal Pradesh	329	328	332
13	Nagaland	297	326	328
14	Manipur	339	348	348
15	Mizoram	332	338	343
16	Tripura	289	299	303
17	Meghalaya	346	348	349
18	Assam	339	340	343
19	West Bengal	347	348	351
20	Jharkhand	330	330	339
21	Odisha	282	323	328
22	Chhattisgarh	337	345	347
23	Madhya Pradesh	242	278	279
24	Gujarat	310	339	341
25	The Dadra And Nagar Haveli And Daman And Diu	343	346	347
27	Maharashtra	266	284	292
28	Andhra Pradesh	345	347	348
29	Karnataka	325	338	343
30	Goa	302	314	321
31	Lakshadweep	338	344	345
32	Kerala	335	342	345
33	Tamil Nadu	289	317	319
34	Puducherry	336	341	344
35	Andaman And Nicobar Islands	278	308	315
36	Telangana	346	350	350
37	Ladakh	344	346	348
00	All India	358	358	358

Annexure 5.2

COICOP mapping of items

Classification of Individual Consumption According to Purpose (COICOP) 2018 classification framework has been adopted by MoSPI till subclass level. An 8-digit coding structure has been devised for an item for its unique identification. The item code conveys specific hierarchical information on COICOP 2018, namely the Division, Group, Class and Subclass. First 2 digits of an item code denote **Division**, third digit when read with the first two digits, identifies the **Group**. Fourth digit read cumulatively, specifies the **Class**. Fifth digit read cumulatively denote the **Subclass**. Sixth digit denotes 'Goods/ Services' ('1' for Goods and '2' for Services). Seventh and Eighth digits represent the **serial number of the item** within the respective subclass.

For illustration, the item code **01.1.1.1.1.01** pertains to the item *Rice*. The structure of the code is explained below:

- The **first two digits** indicate the **Division**. In this case, **01** denotes the Division *Food and Beverages*.
- The **third digit**, when read with the first two digits, identifies the **Group**. Accordingly, **01.1** represents the Group *Food*.
- The **next digit**, read cumulatively, specifies the **Class**. Thus, **01.1.1** corresponds to the Class *Cereals and Cereal Products*.
- The **subsequent digit** denotes the **Subclass**. Hence, **01.1.1.1** represents the Subclass *Cereals*.
- The **following digit** indicates whether the item is a **Good or a Service**. A value of **1** signifies *Goods*, while **2** signifies *Services*. In the present example, **1** denotes that Rice is a Goods item.
- The **last two digits** represent the **serial number of the item** within the respective subclass.

Accordingly, the item code is structured sequentially to represent the Division, Group, Class, Subclass, Goods/Services indicator, and the serial number of the item within its subclass.

COICOP MAPPING TREE
01. Division (Food and beverages)
1.1. Group(Food)
01.1.1. Class(Cereals and cereal products)
01.1.1.1. Subclass(Cereals)
01.1.1.1.1.01. Item(Rice)
01.1.1.1.1.02. Item(Wheat)
01.1.1.1.1.03. Item(Jowar and its products)
01.1.1.1.1.04. Item(Ragi and its products)
01.1.1.1.1.05. Item(Bajra and its products)
01.1.1.1.1.06. Item(Maize and its products)
01.1.1.1.1.07. Item(Small millets and its products)
01.1.1.1.1.08. Item(Barley and its products)
01.1.1.1.1.09. Item(Other cereals and products)
01.1.1.1.1.10. Item(Other wheat products)
01.1.1.1.1.11. Item(Rice PDS)
01.1.1.1.1.12. Item(Wheat PDS)
01.1.1.1.1.13. Item(Jowar PDS)
01.1.1.1.1.14. Item(Ragi PDS)
01.1.1.1.1.15. Item(Bajra PDS)
01.1.1.1.1.16. Item(Maize PDS)
01.1.1.1.1.17. Item(Small millets PDS)
01.1.1.1.1.18. Item(Barley PDS)
01.1.1.2. Subclass(Flour of cereals)
01.1.1.2.1.01. Item(Wheat atta)
01.1.1.2.1.02. Item(Maida)
01.1.1.2.1.03. Item(Wheat atta PDS)
01.1.1.3. Subclass(Bread and bakery products)

01.1.1.3.1.01. Item(Biscuits)
01.1.1.3.1.02. Item(Chips , nachos, puffs, wafers, etc.)
01.1.1.3.1.03. Item(Cake, pastry)
01.1.1.3.1.04. Item(Bread (bakery))
01.1.1.4. Subclass(Breakfast cereals)
01.1.1.4.1.01. Item(Breakfast cereals)
01.1.1.4.1.02. Item(Muri)
01.1.1.4.1.03. Item(Other rice products)
01.1.1.5. Subclass(Macaroni, noodles, couscous and similar pasta products)
01.1.1.5.1.01. Item(Noodles)
01.1.1.5.1.02. Item(Vermicelli (sewai))
01.1.1.9. Subclass(Other milled cereal and grain products)
01.1.1.9.1.01. Item(Suji, rawa)
01.1.1.9.1.02. Item(Chidwa)
01.1.2. Class(Meat, fresh, chilled or frozen)
01.1.2.2. Subclass(Meat, fresh, chilled or frozen)
01.1.2.2.1.01. Item(Chicken)
01.1.2.2.1.02. Item(Goat meat/ mutton)
01.1.2.2.1.03. Item(Beef/ buffalo meat)
01.1.2.2.1.04. Item(Pork)
01.1.2.2.1.05. Item(Others: birds, crab,oyster, etc.)
01.1.3. Class(Fish and other seafood)
01.1.3.1. Subclass(Fish and prawn)
01.1.3.1.1.01. Item(Fish and prawn)
01.1.4. Class(Milk, other dairy products and eggs)
01.1.4.1. Subclass(Milk: liquid)
01.1.4.1.1.01. Item(Milk: liquid)
01.1.4.3. Subclass(Milk: condensed/ powder)

01.1.4.3.1.01. Item(Milk: condensed/ powder)
01.1.4.5. Subclass(Cheese)
01.1.4.5.1.01. Item(Paneer)
01.1.4.5.1.02. Item(Cheese)
01.1.4.6. Subclass(Curd, Yoghurt and similar products)
01.1.4.6.1.01. Item(Curd, yogurt)
01.1.4.6.1.02. Item(Butter milk)
01.1.4.6.1.03. Item(Lassi)
01.1.4.7. Subclass(Milk-based dessert and beverages)
01.1.4.7.1.01. Item(Tea: cups)
01.1.4.7.1.02. Item(Prepared sweets- milk based)
01.1.4.7.1.03. Item(Coffee: cups)
01.1.4.8. Subclass(Eggs)
01.1.4.8.1.01. Item(Eggs)
01.1.4.9. Subclass(Other dairy products)
01.1.4.9.1.01. Item(Other milk products)
01.1.5. Class(Oils and fats)
01.1.5.1. Subclass(Vegetable oils)
01.1.5.1.1.01. Item(Refined oil)
01.1.5.1.1.02. Item(Mustard oil)
01.1.5.1.1.03. Item(Groundnut oil)
01.1.5.1.1.04. Item(Coconut oil)
01.1.5.1.1.05. Item(Edible oil)
01.1.5.1.1.06. Item(Edible oil PDS)
01.1.5.2. Subclass(Butter and other oils and fats derived from milk)
01.1.5.2.1.01. Item(Ghee)
01.1.5.2.1.02. Item(Butter)
01.1.5.3. Subclass(Margarine and similar preparations)

01.1.5.3.1.01. Item(Vanaspati and margarine)
01.1.6. Class(Fruits and nuts)
01.1.6.1. Subclass(Dates, figs and tropical fruits, fresh)
01.1.6.1.1.01. Item(Banana)
01.1.6.1.1.02. Item(Mango)
01.1.6.1.1.03. Item(Green coconut)
01.1.6.1.1.04. Item(Coconut)
01.1.6.1.1.05. Item(Papaya)
01.1.6.1.1.06. Item(Guava)
01.1.6.1.1.07. Item(Pineapple)
01.1.6.1.1.08. Item(Fig: anjeer)
01.1.6.2. Subclass(Citrus fruits, fresh)
01.1.6.2.1.01. Item(Orange and sweet lime (mausami))
01.1.6.2.1.02. Item(Lemon)
01.1.6.3. Subclass(Stone fruits and pome fruits, fresh)
01.1.6.3.1.01. Item(Apple)
01.1.6.3.1.02. Item(Litchi)
01.1.6.3.1.03. Item(Pears/ nashpati)
01.1.6.3.1.04. Item(Apricot)
01.1.6.4. Subclass(Berries, fresh)
01.1.6.4.1.01. Item(Berries)
01.1.6.5. Subclass(Other fruits, fresh)
01.1.6.5.1.01. Item(Grapes)
01.1.6.5.1.02. Item(Watermelon)
01.1.6.5.1.03. Item(Kharbooza)
01.1.6.5.1.04. Item(Singara)
01.1.6.5.1.05. Item(Other fresh fruits)
01.1.6.7. Subclass(Fruits, dried and dehydrated)

01.1.6.7.1.01. Item(Dates)
01.1.6.7.1.02. Item(Raisin (kishmish) and monacca)
01.1.6.7.1.03. Item(Coconut: copra)
01.1.6.7.1.04. Item(Other dry fruits)
01.1.6.8. Subclass(Nuts, in shell or shelled)
01.1.6.8.1.01. Item(Groundnut)
01.1.6.8.1.02. Item(Cashew nut)
01.1.6.8.1.03. Item(Other nuts)
01.1.7. Class(Vegetables, tubers, plantains, cooking bananas and pulses)
01.1.7.1. Subclass(Leafy or stem vegetables, fresh or chilled)
01.1.7.1.1.01. Item(Cauliflower)
01.1.7.1.1.02. Item(Cabbage)
01.1.7.1.1.03. Item(Palak and other leafy vegetables)
01.1.7.2. Subclass(Fruit-bearing vegetables, fresh or chilled)
01.1.7.2.1.01. Item(Tomato)
01.1.7.2.1.02. Item(Lady's finger)
01.1.7.2.1.03. Item(Brinjal)
01.1.7.2.1.04. Item(Green chillies)
01.1.7.2.1.05. Item(Gourd, pumpkin)
01.1.7.2.1.06. Item(Parwal/patal and Kundru)
01.1.7.3. Subclass(Green leguminous vegetables, fresh or chilled)
01.1.7.3.1.01. Item(Beans and Barbati)
01.1.7.3.1.02. Item(Peas)
01.1.7.4. Subclass(Other vegetables, fresh or chilled)
01.1.7.4.1.01. Item(Onion)
01.1.7.4.1.02. Item(Garlic)
01.1.7.4.1.03. Item(Carrot)
01.1.7.4.1.04. Item(Radish)

01.1.7.4.1.05. Item(Jackfruit)
01.1.7.4.1.06. Item(Other vegetables)
01.1.7.5. Subclass(Tubers, plantains and cooking bananas, fresh or chilled)
01.1.7.5.1.01. Item(Potato)
01.1.7.6. Subclass(Pulses)
01.1.7.6.1.01. Item(Arhar, tur)
01.1.7.6.1.02. Item(Moong)
01.1.7.6.1.03. Item(Urd)
01.1.7.6.1.04. Item(Masur)
01.1.7.6.1.05. Item(Gram: split)
01.1.7.6.1.06. Item(Gram: whole)
01.1.7.6.1.07. Item(Peas, chickpeas)
01.1.7.6.1.08. Item(Other pulses)
01.1.7.6.1.09. Item(Pulses PDS)
01.1.7.9. Subclass(Vegetables, tubers, plantains, cooking bananas and pulses ground, and in other preparations)
01.1.7.9.1.01. Item(Besan and Gram products)
01.1.7.9.1.02. Item(Pickles)
01.1.7.9.1.03. Item(Other pulse products)
01.1.8. Class(Sugar, confectionery and desserts)
01.1.8.1. Subclass(Cane sugar and beet sugar)
01.1.8.1.1.01. Item(Sugar)
01.1.8.1.1.02. Item(Jaggery (gur))
01.1.8.1.1.03. Item(Sugar PDS)
01.1.8.3. Subclass(Jams, marmalades, fruit jellies, purées and pastes, and honey)
01.1.8.3.1.01. Item(Jam/ jelly)
01.1.8.3.1.02. Item(Honey)
01.1.8.5. Subclass(Chocolate, cocoa and cocoa-based food products)

01.1.8.5.1.01. Item(Chocolates, etc.)
01.1.8.6. Subclass(Ice, ice cream and sorbets)
01.1.8.6.1.01. Item(Ice-cream)
01.1.8.9. Subclass(Other sugar confectionery and desserts)
01.1.8.9.1.01. Item(Prepared sweets - non milk based)
01.1.8.9.1.02. Item(Candy, misri)
01.1.9. Class(Ready-made food and other food products)
01.1.9.1. Subclass(Ready-made food)
01.1.9.1.1.01. Item(Other served processed food)
01.1.9.1.1.02. Item(Other packaged processed food)
01.1.9.2. Subclass(Baby food)
01.1.9.2.1.01. Item(Baby food)
01.1.9.3. Subclass(Salt, condiments and sauces)
01.1.9.3.1.01. Item(Salt)
01.1.9.3.1.02. Item(Sauce and Mayonnaise)
01.1.9.3.1.03. Item(Salt PDS)
01.1.9.4. Subclass(Spices, culinary herbs and seeds)
01.1.9.4.1.01. Item(Dry chillies)
01.1.9.4.1.02. Item(Cumin (jeera))
01.1.9.4.1.03. Item(Coriander (dhania))
01.1.9.4.1.04. Item(Ginger)
01.1.9.4.1.05. Item(Turmeric)
01.1.9.4.1.06. Item(Curry powder)
01.1.9.4.1.07. Item(Black pepper)
01.1.9.4.1.08. Item(Tamarind)
01.1.9.4.1.09. Item(Oilseeds)
01.1.9.4.1.10. Item(Poppy seeds)
01.1.9.4.1.11. Item(Other spices)

01.1.9.9. Subclass(Other food products n.e.c.)
01.1.9.9.1.01. Item(Papad, bhujia, namkeen, mixture and chanachur)
01.1.9.9.1.02. Item(Health supplements (probiotic tablet and drinks))
1.2. Group(Beverages)
01.2.1. Class(Fruit and vegetable juices)
01.2.1. Subclass(Fruit and vegetable juices)
01.2.1.0.1.01. Item(Fruit juice)
01.2.2. Class(Coffee and coffee substitutes)
01.2.2. Subclass(Coffee: powder)
01.2.2.0.1.01. Item(Coffee: powder)
01.2.3. Class(Tea, maté and other plant-derived products for infusion)
01.2.3. Subclass(Tea: leaf)
01.2.3.0.1.01. Item(Tea: leaf)
01.2.4. Class(Cocoa drinks)
01.2.4. Subclass(Cocoa drinks)
01.2.4.0.1.01. Item(Beverages: cocoa and chocolate drink)
01.2.5. Class(Water)
01.2.5. Subclass(Packaged water)
01.2.5.0.1.01. Item(Packaged water)
01.2.6. Class(Soft drinks)
01.2.6. Subclass(Soda drinks)
01.2.6.0.1.01. Item(Soda drinks)
01.2.9. Class(Other beverages)
01.2.9. Subclass(Other beverages)
01.2.9.0.1.01. Item(Health supplements (protein powder))
01.2.9.0.1.02. Item(Health drinks)
01.2.9.0.1.03. Item(Other cold beverages)
1.3. Group(Services for processing primary goods for food)

01.3. Class(Services for processing primary goods for food)
01.3.0. Subclass(Services for processing primary goods for food)
01.3.0.0.2.01. Item(Grinding/ husking charges)
02. Division(Paan, tobacco and intoxicants)
2.1. Group(Alcoholic beverages)
02.1.1. Class(Spirits and liquors)
02.1.1. Subclass(Spirits and liquors)
02.1.1.0.1.01. Item(Foreign/refined liquor or wine)
02.1.1.0.1.02. Item(Country liquor)
02.1.2. Class(Wine)
02.1.2.2. Subclass(Wine from other sources)
02.1.2.2.1.01. Item(Toddy)
02.1.3. Class(Beer)
02.1.3. Subclass(Beer)
02.1.3.0.1.01. Item(Beer)
02.1.9. Class(Other alcoholic beverages)
02.1.9. Subclass(Other alcoholic beverages)
02.1.9.0.1.01. Item(Other intoxicants)
2.3. Group(Paan and tobacco)
02.3. Class(Paan and other tobacco products)
02.3.0.1. Subclass(Cigarettes)
02.3.0.1.1.01. Item(Cigarettes)
02.3.0.2. Subclass(Cigars)
02.3.0.2.1.01. Item(Cheroot)
02.3.0.9. Subclass(Paan and other tobacco products)
02.3.0.9.1.01. Item(Gutka, zarda, kimam, surti)
02.3.0.9.1.02. Item(Paan: finished)
02.3.0.9.1.03. Item(Bidi)

02.3.0.9.1.04. Item(Ingredients for paan)
02.3.0.9.1.05. Item(Leaf tobacco)
02.3.0.9.1.06. Item(Paan: leaf)
02.3.0.9.1.07. Item(Hookah tobacco)
02.3.0.9.1.08. Item(Snuff)
02.3.0.9.1.09. Item(Other tobacco products)
03. Division(Clothing and footwear)
3.1. Group(Clothing)
03.1.1. Class(Clothing materials)
03.1.1. Subclass(Clothing materials)
03.1.1.0.1.01. Item(Clothing materials)
03.1.2. Class(Garments)
03.1.2.1. Subclass(Garments for men or boys)
03.1.2.1.1.01. Item(Shirts, T-shirts, Kurta (gents))
03.1.2.1.1.02. Item(Trousers, jeans, track pant, shorts (gents))
03.1.2.1.1.03. Item(Coat, jacket, blazer, sweater, sweatshirts and windcheater (gents))
03.1.2.1.1.04. Item(Dhoti/ Lungi)
03.1.2.1.1.05. Item(Other garments for men or boys)
03.1.2.2. Subclass(Garments for women or girls)
03.1.2.2.1.01. Item(Saree)
03.1.2.2.1.02. Item(Tops, shrugs, kurti (ladies))
03.1.2.2.1.03. Item(Trousers, jeans, slawars, Skirts (ladies))
03.1.2.2.1.04. Item(Coat, jacket, blazer, sweater, sweatshirts and windcheater (ladies))
03.1.2.2.1.05. Item(Other garments for women or girls)
03.1.2.3. Subclass(Garments for infants (under 2 years of age))
03.1.2.3.1.01. Item(Garments for infants)
03.1.2.4. Subclass(School uniforms)
03.1.2.4.1.01. Item(School uniforms)

03.1.3. Class(Other articles of clothing and clothing accessories)
03.1.3.1. Subclass(Other articles of clothing)
03.1.3.1.1.01. Item(Gamchha, towel and handkerchief)
03.1.3.1.1.02. Item(Shawl and chaddar)
03.1.3.1.1.03. Item(Other articles of clothing (including knitting wool))
03.1.4. Class(Cleaning, ironing, dry cleaning, dyeing, repair, tailoring and hire of clothing)
03.1.4.1. Subclass(Cleaning, ironing, dry cleaning and dyeing of clothing)
03.1.4.1.2.01. Item(Washerman, laundry, ironing, dry cleaning and dyeing)
03.1.4.2. Subclass(Repair, tailoring and hire of clothing)
03.1.4.2.2.01. Item(Tailor)
3.2. Group(Footwear)
03.2.1. Class(Shoes and other footwear)
03.2.1.1. Subclass(Footwear for men)
03.2.1.1.1.01. Item(Footwear for men)
03.2.1.2. Subclass(Footwear for women)
03.2.1.2.1.01. Item(Footwear for women)
03.2.1.3. Subclass(Footwear for infants and children)
03.2.1.3.1.01. Item(Footwear for infants and children)
04. Division(Housing, water, electricity, gas and other fuels)
4.1. Group(Actual rental payments made for housing)
04.1.1. Class(Actual rental payments made by tenants for main residence)
04.1.1. Subclass(Actual rental payments made by tenants for main residence)
04.1.1.0.2.01. Item(House Rent)
4.3. Group(Maintenance, repair and security of the dwelling)
04.3.1. Class(Security equipment and materials for dwelling maintenance and repair)
04.3.1.1. Subclass(Materials for the maintenance and repair of the dwelling)
04.3.1.1.1.01. Item(Plugs, switches and other electrical fittings)
04.3.2. Class(Services for the maintenance, repair and security of the dwelling)

04.3.2. Subclass(Services for the maintenance, repair and security of the dwelling)
04.3.2.0.2.01. Item(Residential building and land (minor repairs))
04.3.2.0.2.02. Item(Repair charges for non-durables (electricity charges, plumbing charges etc.))
04.3.2.0.2.03. Item(Watchmen/security guard)
04.3.2.0.2.04. Item(Other consumer rent)
4.4. Group(Water supply and miscellaneous services relating to the dwelling)
04.4.1. Class(Water supply)
04.4.1.1. Subclass(Water charges)
04.4.1.1.2.01. Item(Water charges)
04.4.4. Class(Other services related to the dwelling)
04.4.4.9. Subclass(Other services related to the dwelling n.e.c.)
04.4.4.9.2.01. Item(Sweeper)
4.5. Group(Electricity, gas and other fuels)
04.5.1. Class(Electricity)
04.5.1. Subclass(Electricity)
04.5.1.0.2.01. Item(Electricity charges)
04.5.2. Class(Gas)
04.5.2.2. Subclass(LPG Cylinders and Piped natural gas)
04.5.2.2.1.01. Item(LPG cylinder and piped natural gas)
04.5.3. Class(Liquid fuels)
04.5.3. Subclass(Liquid fuels)
04.5.3.0.1.01. Item(Kerosene)
04.5.3.0.1.02. Item(Kerosene PDS)
04.5.4. Class(Solid fuels)
04.5.4.1. Subclass(Coal)
04.5.4.1.1.01. Item(Coal)
04.5.4.2. Subclass(Firewood and chips)

04.5.4.2.1.01. Item(Firewood and chips)
04.5.4.3. Subclass(Charcoal)
04.5.4.3.1.01. Item(Charcoal)
04.5.4.9. Subclass(Other solid fuels)
04.5.4.9.1.01. Item(Dung cake)
04.5.4.9.1.02. Item(Fuel (biogas and gobar gas))
05. Division(Furnishings, household equipment and routine household maintenance)
5.1. Group(Furniture, furnishings, and loose carpets)
05.1.1. Class(Furniture, furnishings and loose carpets)
05.1.1.1. Subclass(Household furniture)
05.1.1.1.1.01. Item(Chair, stool, bench and table)
05.1.1.1.1.02. Item(Almirah and dressing table)
05.1.1.1.1.03. Item(Bedstead)
05.1.1.1.1.04. Item(Other furniture and fixtures)
05.1.1.3. Subclass(Lighting equipment)
05.1.1.3.1.01. Item(Lantern, lamp, electric lampshade and emergency light)
05.1.1.3.1.02. Item(Other electric bulb, tubelight and decorative lights)
05.1.1.4. Subclass(Furnishings, loose carpets and rugs)
05.1.1.4.1.01. Item(Carpet, daree and other floor mattings)
05.1.1.4.1.02. Item(Paintings, drawings and engravings)
5.2. Group(Household textiles)
05.2.1. Class(Household textiles)
05.2.1.1. Subclass(Furnishing fabrics and curtains)
05.2.1.1.1.01. Item(Cloth for upholstery, curtains, tablecloth etc.)
05.2.1.2. Subclass(Bed linen and bedding)
05.2.1.2.1.01. Item(Bed sheet and bed cover)
05.2.1.2.1.02. Item(Rug and blanket)
05.2.1.2.1.03. Item(Pillow and cushion)

05.2.1.2.1.04. Item(Quilt and mattress)
05.2.1.2.1.05. Item(Mosquito net)
05.2.1.2.1.06. Item(Bedding)
5.3. Group(Household appliances)
05.3.1. Class(Major electric and other household appliances)
05.3.1.1. Subclass(Major kitchen appliances)
05.3.1.1.1.01. Item(Refrigerator/freezers)
05.3.1.1.1.02. Item(stove, gas burner and induction)
05.3.1.2. Subclass(Major laundry appliances)
05.3.1.2.1.01. Item(Washing machine)
05.3.1.3. Subclass(Heaters and air conditioners)
05.3.1.3.1.01. Item(Air conditioner)
05.3.1.3.1.02. Item(Air cooler)
05.3.1.3.1.03. Item(Geysers and sterilizers)
05.3.1.3.1.04. Item(Electric air heaters and blowers)
05.3.1.3.1.05. Item(Ventilation system such as exhaust, chimney, etc.)
05.3.1.9. Subclass(Other major household appliances)
05.3.1.9.1.01. Item(Water purifier)
05.3.1.9.1.02. Item(Inverter, generators and stabilizers)
05.3.1.9.1.03. Item(Sewing machine)
05.3.1.9.1.04. Item(Air purifier)
05.3.1.9.1.05. Item(Other machines for household work)
05.3.1.9.1.06. Item(Other durables)
05.3.2. Class(Small household appliances)
05.3.2.1. Subclass(Small appliances for the cooking and processing of food)
05.3.2.1.1.01. Item(Mixer/grinder, juicer and food processor)
05.3.2.1.1.02. Item(Other cooking/ household appliances)
05.3.2.9. Subclass(Other small household appliances)

05.3.2.9.1.01. Item(Electric fan)
05.3.2.9.1.02. Item(Bathroom and sanitary equipment)
05.3.2.9.1.03. Item(Electric iron, heater, toaster, micro-oven, electric kettle, vacuum cleaner and other electric heating appliances)
5.4. Group(Glassware, tableware and household utensils)
05.4. Class(Glassware, tableware and household utensils)
05.4.0.1. Subclass(Glassware, crystal ware, ceramic ware and china ware)
05.4.0.1.1.01. Item(Glassware)
05.4.0.3. Subclass(Kitchen utensils and articles)
05.4.0.3.1.01. Item(Bucket and other plastic goods)
05.4.0.3.1.02. Item(Stainless steel utensils)
05.4.0.3.1.03. Item(Water bottle/feeding bottle)
05.4.0.3.1.04. Item(Casseroles, thermos, flask and thermoware)
05.4.0.3.1.05. Item(Other metal utensils (non-stick cookware, etc.))
05.4.0.3.1.06. Item(Other crockery and utensils)
05.4.0.3.1.07. Item(Pressure cooker/ pressure pan)
5.5. Group(Tools and equipment for house and garden)
05.5.2. Class(Non-motorized tools and miscellaneous accessories)
05.5.2.2. Subclass(Miscellaneous accessories)
05.5.2.2.1.01. Item(LED bulb, CFL bulbs)
05.5.2.2.1.02. Item(Electric batteries)
05.5.2.2.1.03. Item(Other minor durable-type goods)
5.6. Group(Goods and services for routine household maintenance)
05.6.1. Class(Non-durable household goods)
05.6.1.1. Subclass(Household cleaning and maintenance products)
05.6.1.1.1.01. Item(Washing soap/soda/powder/liquid detergent)
05.6.1.1.1.02. Item(Floor cleaner, toilet cleaner)
05.6.1.1.1.03. Item(Other washing requisites)

05.6.1.9. Subclass(Other non-durable household goods)
05.6.1.9.1.01. Item(Incense (agarbatti) and room freshener)
05.6.1.9.1.02. Item(Mosquito repellent, insecticide, anti-rodent, etc.)
05.6.1.9.1.03. Item(Earthenware, paperware, thermocol plates, etc.)
05.6.1.9.1.04. Item(Matchbox)
05.6.1.9.1.05. Item(Candle)
05.6.1.9.1.06. Item(Other petty articles)
05.6.2. Class(Domestic services and household services)
05.6.2.1. Subclass(Domestic services provided by paid staff)
05.6.2.1.2.01. Item(Domestic helper/cook)
05.6.2.1.2.02. Item(Driver)
05.6.2.1.2.03. Item(Attendant, babysitter)
05.6.2.9. Subclass(Other consumer services excluding conveyance)
05.6.2.9.2.01. Item(Other consumer services excluding conveyance)
06. Division(Health)
6.1. Group(Medicines and health products)
06.1.1. Class(Medicines)
06.1.1.1. Subclass(Medicines and vaccines)
06.1.1.1.1.01. Item(Medicine)
06.1.1.2. Subclass(Health supplements)
06.1.1.2.1.01. Item(Health supplements (chawanprash))
06.1.2. Class(Medical products)
06.1.2.1. Subclass(Medical diagnostic products)
06.1.2.1.1.01. Item(Other medical equipment)
06.1.2.2. Subclass(Family planning devices)
06.1.2.2.1.01. Item(Family planning devices)
06.1.2.3. Subclass(Treatment devices for personal use)
06.1.2.3.1.01. Item(Nebulizer)

06.1.3. Class(Assistive products)
06.1.3.1. Subclass(Assistive products for vision)
06.1.3.1.1.01. Item(Spectacles/goggles, contact lenses)
06.1.3.2. Subclass(Assistive products for hearing and communication)
06.1.3.2.1.01. Item(Hearing aids and orthopaedic equipment)
06.1.3.3. Subclass(Assistive products for mobility and daily living)
06.1.3.3.1.01. Item(Massager)
06.1.3.3.1.02. Item(Wheelchair)
6.2. Group(Outpatient care services)
06.2.3. Class(Other outpatient care services)
06.2.3.1. Subclass(Outpatient curative and rehabilitative services)
06.2.3.1.2.01. Item(Doctor's/surgeon's fee)
06.2.3.1.2.02. Item(Other medical expenses)
6.3. Group(Inpatient care services)
06.3.1. Class(Inpatient curative and rehabilitative services)
06.3.1. Subclass(Inpatient curative and rehabilitative services)
06.3.1.0.2.01. Item(Hospital and nursing home charges)
6.4. Group(Other health services)
06.4.1. Class(Diagnostic imaging services and medical laboratory services)
06.4.1. Subclass(Diagnostic imaging services and medical laboratory services)
06.4.1.0.2.01. Item(X-ray, ECG and pathological test)
07. Division(Transport)
7.1. Group(Purchase of vehicles)
07.1.1. Class(Motor cars)
07.1.1.1. Subclass(Motor car and jeep)
07.1.1.1.1.01. Item(Motor car and jeep)
07.1.2. Class(Motorcycles)
07.1.2. Subclass(Motor cycle and scooter)

07.1.2.0.1.01. Item(Motor cycle and scooter)
07.1.3. Class(Bicycles)
07.1.3. Subclass(Bicycle)
07.1.3.0.1.01. Item(Bicycle)
7.2. Group(Operation of personal transport equipment)
07.2.1. Class(Parts and accessories for personal transport equipment)
07.2.1.1. Subclass(Tyres and tubes)
07.2.1.1.1.01. Item(Tyres and tubes)
07.2.1.2. Subclass(Parts for personal transport equipment)
07.2.1.2.1.01. Item(Other transport equipment)
07.2.1.3. Subclass(Accessories for personal transport equipment)
07.2.1.3.1.01. Item(Helmet)
07.2.2. Class(Fuels and lubricants for personal transport equipment)
07.2.2.1. Subclass(Diesel)
07.2.2.1.1.01. Item(Diesel)
07.2.2.2. Subclass(Petrol)
07.2.2.2.1.01. Item(Petrol)
07.2.2.3. Subclass(Other fuels for personal transport equipment)
07.2.2.3.1.01. Item(Other natural gas (CNG))
7.3. Group(Passenger transport services)
07.3.1. Class(Passenger transport by railway)
07.3.1.1. Subclass(Passenger transport by train)
07.3.1.1.2.01. Item(Rail fare)
07.3.1.2. Subclass(Passenger transport by rapid transit and tram)
07.3.1.2.2.01. Item(Bus/tram fare: occasional)
07.3.2. Class(Passenger transport by road)
07.3.2.1. Subclass(Passenger transport by bus and coach)
07.3.2.1.2.01. Item(Bus/tram fare for commuting to work: daily)

07.3.2.1.2.02. Item(Bus fare for commuting to work: periodic)
07.3.2.2. Subclass(Passenger transport by taxi and hired vehicle with driver)
07.3.2.2.2.01. Item(Taxi fare)
07.3.2.2.2.02. Item(Car/bus hired for ceremonial occasion, picnic, etc)
07.3.2.3. Subclass(Passenger transport for students to and from school)
07.3.2.3.2.01. Item(Bus fare for school, college: periodic)
07.3.2.3.2.02. Item(Bus /tram fare for school, college: daily)
07.3.2.9. Subclass(Other passenger transport by road)
07.3.2.9.2.01. Item(Auto-rickshaw/e-rickshaw fare)
07.3.2.9.2.02. Item(Rickshaw fare)
07.3.2.9.2.03. Item(Other conveyance expenses)
07.3.3. Class(Passenger transport by air)
07.3.3.1. Subclass(Passenger transport by air, domestic)
07.3.3.1.2.01. Item(Airfare)
07.3.4. Class(Passenger transport by sea and inland waterway)
07.3.4. Subclass(Passenger transport by sea and inland waterway)
07.3.4.0.2.01. Item(Steamer, boat fare)
7.4. Group(Transport services for goods)
07.4.1. Class(Postal and courier services)
07.4.1.2. Subclass(Courier and parcel delivery services)
07.4.1.2.2.01. Item(Postage, couriers and money order)
08. Division(Information and communication)
8.1. Group(Information and communication equipment)
08.1.1. Class(Telephone instrument (landline))
08.1.1. Subclass(Telephone instrument (landline))
08.1.1.0.1.01. Item(Telephone instrument (landline))
08.1.2. Class(Mobile handset)
08.1.2. Subclass(Mobile handset)

08.1.2.0.1.01. Item(Mobile handset)
08.1.3. Class(Information processing equipment)
08.1.3.1. Subclass(Computers, laptops and tablets including Software)
08.1.3.1.1.01. Item(PC/ Laptop/ tablet and other peripherals incl. software)
08.1.4. Class(Audio-visual devices)
08.1.4. Subclass(Audio-visual devices)
08.1.4.0.1.01. Item(Television)
08.1.4.0.1.02. Item(Headphone, earphone, ear pod, airpod and bluetooth devices)
08.1.5. Class(Unrecorded recording media)
08.1.5. Subclass(Unrecorded recording media)
08.1.5.0.1.01. Item(Pen-drive and external hard disk)
8.3. Group(Information and communication services)
08.3.3. Class(Internet access provision services and online storage services)
08.3.3. Subclass(Internet expenses)
08.3.3.0.2.01. Item(Internet expenses)
08.3.4. Class(Telephone charges: mobile and landline)
08.3.4. Subclass(Telephone charges: mobile and landline)
08.3.4.0.2.01. Item(Telephone charges: mobile)
08.3.4.0.2.02. Item(Telephone charges: landline)
08.3.9. Class(Other information and communication services)
08.3.9.2. Subclass(Subscriptions to streaming services)
08.3.9.2.1.01. Item(Cable TV/DTH/set top box)
08.3.9.2.2.02. Item(Online media service provider/streaming services)
09. Division(Recreation, sport and culture)
9.1. Group(Recreational durables)
09.1.1. Class(Photographic and cinematographic equipment and optical instruments)
09.1.1.1. Subclass(Camera and photographic equipment)
09.1.1.1.1.01. Item(Camera and photographic equipment)

9.2. Group(Other recreational goods)
09.2.1. Class(Games, toys and hobby-related articles)
09.2.1.1. Subclass(Other goods for recreation)
09.2.1.1.1.01. Item(Other goods for recreation)
09.2.2. Class(Sporting, camping and open-air recreation equipment)
09.2.2.1. Subclass(Sporting equipment)
09.2.2.1.1.01. Item(Sports goods)
09.2.2.1.1.02. Item(Exercise equipment)
09.2.2.1.1.03. Item(Other sports goods)
9.3. Group(Garden products and pets)
09.3.1. Class(Garden products, plants and flowers)
09.3.1.2. Subclass(Plants, seeds and flowers)
09.3.1.2.1.01. Item(Flower (fresh))
09.3.2. Class(Pets and pet products)
09.3.2.1. Subclass(Pets)
09.3.2.1.1.01. Item(Pet animals)
9.4. Group(Recreational services)
09.4.6. Class(Recreational and sporting services)
09.4.6.1. Subclass(Recreational and leisure services)
09.4.6.1.2.01. Item(Other entertainment (mela, fair, picnic, etc.))
09.4.6.2. Subclass(Services associated with the practice of sports)
09.4.6.2.2.01. Item(Club, gym, swimming fees and other subscriptions)
9.5. Group(Cultural goods)
09.5.1. Class(Musical instruments)
09.5.1. Subclass(Musical instruments)
09.5.1.0.1.01. Item(Musical instruments)
9.6. Group(Cultural services)
09.6.1. Class(Services provided by cinemas, theatres and concert venues)

09.6.1. Subclass(Cinema, theatre)
09.6.1.0.2.01. Item(Cinema, theatre)
09.6.3. Class(Photographic services)
09.6.3. Subclass(Photography)
09.6.3.0.1.01. Item(Photography)
9.7. Group(Newspapers, books and stationery)
09.7.1. Class(Books)
09.7.1.1. Subclass(Educational books and textbooks)
09.7.1.1.1.01. Item(Books/ journals)
09.7.2. Class(Newspapers and periodicals)
09.7.2.1. Subclass(Newspapers and periodicals)
09.7.2.1.1.01. Item(Newspapers and periodicals)
09.7.4. Class(Stationery and drawing materials)
09.7.4. Subclass(Stationery and drawing materials)
09.7.4.0.1.01. Item(Stationery)
10. Division(Education services)
10.1. Group(Early childhood and primary education)
10.1. Class(Early childhood and primary education)
10.1.0.2. Subclass(Primary education)
10.1.0.2.2.01. Item(Tuition fees (Primary/Upper Primary class))
10.2. Group(Secondary education)
10.2. Class(Secondary education)
10.2.0. Subclass(Secondary education)
10.2.0.0.2.01. Item(Tuition fees (Secondary/Upper Secondary class))
10.4. Group(Higher education)
10.4. Class(Higher education)
10.4.0. Subclass(Higher education)
10.4.0.0.2.01. Item(Tuition fees (Higher education))

10.5. Group(Education not defined by level)
10.5. Class(Education not defined by level)
10.5.0.1. Subclass(Private tutor/ coaching centre and other educational expenses)
10.5.0.1.2.01. Item(Private tutor/ coaching centre)
10.5.0.1.2.02. Item(Other educational expenses)
11. Division(Restaurants and accommodation services)
11.1. Group(Food and beverage serving services)
11.1.1. Class(Restaurants, cafés and the like)
11.1.1.1. Subclass(Restaurants, cafés and the like – with full service)
11.1.1.1.1.01. Item(Cooked meals)
11.1.1.2. Subclass(Restaurants, cafés and the like – with limited service)
11.1.1.2.1.01. Item(Cooked snacks)
11.2. Group(Accommodation services)
11.2. Class(Accommodation services)
11.2.0.1. Subclass(Hotels, motels, inns and similar accommodation services)
11.2.0.1.2.01. Item(Hotel lodging charges)
13. Division(Personal care, social protection and miscellaneous goods and services)
13.1. Group(Personal care)
13.1.1. Class(Appliances for personal care)
13.1.1.1. Subclass(Purchase of appliances for personal care)
13.1.1.1.1.01. Item(Other personal goods)
13.1.2. Class(Other appliances, articles and products for personal care)
13.1.2. Subclass(Other appliances, articles and products for personal care)
13.1.2.0.1.01. Item(Toilet soap, body-wash, hand-wash, shower gel and face-wash)
13.1.2.0.1.02. Item(Perfume, body spray, deodorant and roll-ons)
13.1.2.0.1.03. Item(Powder, cream, body lotion and moisturizers)
13.1.2.0.1.04. Item(Toothpaste, mouthwash and toothbrush)
13.1.2.0.1.05. Item(Hair oil and hair colour)

13.1.2.0.1.06. Item(Shampoo, conditioner, hair serum/gel and hair cream)
13.1.2.0.1.07. Item(Sanitary napkins)
13.1.2.0.1.08. Item(Baby products)
13.1.2.0.1.09. Item(Shaving blades, shaving stick and razor)
13.1.2.0.1.10. Item(Shaving cream, shaving foam, aftershave lotion and aftershave balm)
13.1.2.0.1.11. Item(Sanitizer)
13.1.2.0.1.12. Item(Weighing machine)
13.1.2.0.1.13. Item(Other beauty products)
13.1.2.0.1.14. Item(Other toilet articles)
13.1.2.0.1.15. Item(Other hair products)
13.1.3. Class(Hairdressing salons and personal grooming establishments)
13.1.3.2. Subclass(Personal grooming treatments)
13.1.3.2.2.01. Item(Barber, beautician and spas)
13.2. Group(Other personal effects)
13.2.1. Class(Jewellery and watches)
13.2.1.1. Subclass(Purchase of jewellery and watches)
13.2.1.1.1.01. Item(Gold /diamond /platinum jewellery)
13.2.1.1.1.02. Item(Silver jewellery)
13.2.1.1.1.03. Item(Clock, watch, smartwatch and fitness tracker)
13.2.1.1.1.04. Item(Jewels, pearls, precious stones)
13.2.1.1.1.05. Item(Other jewellery and ornaments)
13.2.9. Class (Other personal effects n.e.c.)
13.2.9.1. Subclass (Travel goods, baby articles and other personal effects n.e.c.)
13.2.9.1.1.01. Item(Back-pack, handbags, vanity bags, purse and clutch)
13.2.9.1.1.02. Item(Suitcase, trolley bag, duffle bag and trunk)
13.2.9.1.1.03. Item(Umbrella and Raincoat)
13.9. Group(Other services)
13.9. Class(Other services)

13.9.0.2. Subclass(Religious services)
13.9.0.2.2.01. Item(Priest)
13.9.0.9. Subclass (Other services n.e.c.)
13.9.0.9.2.01. Item(Photocopying charges)
13.9.0.9.2.02. Item(Legal expenses)

Annexure 5.3a

All India Division Wise Weights				
		Sector		
Division Code	**Division Name**	**Rural**	**Urban**	**Combined**
01	Food and beverages	23.2668354968033000	13.4862708132975000	36.7531063101009000
02	Paan, tobacco and intoxicants	2.0690504989010600	0.9204008485469650	2.9894513474480300
03	Clothing and footwear	3.9475118262976400	2.4357453214647000	6.3832571477623400
04	Housing, water, electricity, gas and other fuels	6.5195192128156600	11.1450534755273000	17.6645726883430000
05	Furnishings, household equipment and routine household maintenance	2.5541028797596500	1.9152903262797100	4.4693932060393600
06	Health	3.7484915453549100	2.3517718073707400	6.1002633527256500
07	Transport	4.7905873148584400	4.0055260767040000	8.7961133915624400
08	Information and communication	2.0211533908802600	1.5882850780778000	3.6094384689580600
09	Recreation, sport and culture	0.7533580915556240	0.7624566835586620	1.5158147751142900
10	Education services	1.3203769111713800	2.0129318992156600	3.3333088103870400
11	Restaurants and accommodation services	1.5742595221755900	1.7732608307912800	3.3475203529668700
13	Personal care, social protection and miscellaneous goods and services	2.8539589324327400	2.1838012161590500	5.0377601485917900
	Total	55.4192056230063000	44.5807943769934000	100

Annexure 5.3b

All India Group Wise Weights				
		Sector		
Group Code	**Group Name**	**Rural**	**Urban**	**Combined**
01.1	Food	22.1310814733155000	12.6466216883839000	34.7777031616994000
01.2	Beverages	0.9921138954714080	0.7803196489615850	1.7724335444329900
01.3	Services for processing primary goods for food	0.1436401280163980	0.0593294759521005	0.2029696039684990
02.1	Alcoholic beverages	0.9760163569339660	0.4698266823177260	1.4458430392516900
02.3	Paan and tobacco	1.0930341419670900	0.4505741662292400	1.5436083081963300
03.1	Clothing	3.4301114114697700	2.1014891912538700	5.5316006027236400
03.2	Footwear	0.5174004148278730	0.3342561302108280	0.8516565450387010
04.1	Actual rental payments made for housing	2.4572084201829000	8.4277619236600600	10.8849703438430000
04.3	Maintenance, repair and security of the dwelling	0.7480149554883370	0.4407070258926050	1.1887219813809400
04.4	Water supply and miscellaneous services relating to the dwelling	0.0693813126970542	0.1600704190376360	0.2294517317346910
04.5	Electricity, gas and other fuels	3.2449145244473700	2.1165141069370000	5.3614286313843700
05.1	Furniture, furnishings, and loose carpets	0.2662917421270520	0.1647374195845120	0.4310291617115640
05.2	Household textiles	0.2223173247847730	0.1336985660911730	0.3560158908759450
05.3	Household appliances	0.3968988437312530	0.3450271426864370	0.7419259864176900
05.4	Glassware, tableware and household utensils	0.3445232694191350	0.2125567107393940	0.5570799801585290
05.5	Tools and equipment for house and garden	0.1596111379954380	0.0786915196762907	0.2383026576717290
05.6	Goods and services for routine household maintenance	1.1644605617020000	0.9805789675019030	2.1450395292039000
06.1	Medicines and health products	2.4265508175058600	1.4701961208986700	3.8967469384045200
06.2	Outpatient care services	0.6525639362295410	0.4464468718530040	1.0990108080825500
06.3	Inpatient care services	0.2890150993320140	0.2057874917984040	0.4948025911304180
06.4	Other health services	0.3803616922874950	0.2293413228206640	0.6097030151081590
07.1	Purchase of vehicles	0.5811667841055290	0.6032886140604220	1.1844553981659500
07.2	Operation of personal transport equipment	2.7275606498686900	2.3094223504624000	5.0369830003310900
07.3	Passenger transport services	1.4788162410098000	1.0881993545528600	2.5670155955626600
07.4	Transport services for goods	0.0030436398744178	0.0046157576283182	0.0076593975027359

All India Group Wise Weights				
		Sector		
Group Code	**Group Name**	**Rural**	**Urban**	**Combined**
08.1	Information and communication equipment	0.4276291652388010	0.3629483560749700	0.7905775213137720
08.3	Information and communication services	1.5935242256414500	1.2253367220028300	2.8188609476442900
09.1	Recreational durables	0.0008272799116248	0.0019401072465125	0.0027673871581372
09.2	Other recreational goods	0.0739320472008295	0.0509648655244210	0.1248969127252510
09.3	Garden products and pets	0.0732544711243568	0.0841056146896911	0.1573600858140480
09.4	Recreational services	0.1158316010963150	0.1740762082413830	0.2899078093376980
09.5	Cultural goods	0.0044312153784563	0.0043772351595368	0.0088084505379930
09.6	Cultural services	0.0662089232649627	0.1039650037320880	0.1701739269970510
09.7	Newspapers, books and stationery	0.4188725535790790	0.3430276489650300	0.7619002025441090
10.1	Early childhood and primary education	0.5974501290158170	0.9868296389234630	1.5842797679392800
10.2	Secondary education	0.2194715816517810	0.3853111027375580	0.6047826843893390
10.4	Higher education	0.1791834318903450	0.3283427854254230	0.5075262173157680
10.5	Education not defined by level	0.3242717686134370	0.3124483721292200	0.6367201407426570
11.1	Food and beverage serving services	1.5644075995125700	1.7652542147250800	3.3296618142376500
11.2	Accommodation services	0.0098519226630209	0.0080066160662056	0.0178585387292265
13.1	Personal care	1.9659080567369000	1.4944262501920600	3.4603343069289600
13.2	Other personal effects	0.7766591144590200	0.6172546928746700	1.3939138073336900
13.9	Other services	0.1113917612368190	0.0721202730923229	0.1835120343291420
	Total	55.4192056230062000	44.5807943769934000	100

Annexure 5.3c

State Wise Sector Wise Weights

State Code	State name	Rural	Urban	Combined
01	Jammu And Kashmir	0.7881437225996130	0.3106194076355430	1.0987631302351600
02	Himachal Pradesh	0.5545782411578080	0.1030781213347580	0.6576563624925660
03	Punjab	1.5480845038353400	1.3231668247953800	2.8712513286307200
04	Chandigarh		0.2338467546933460	0.2338467546933460
05	Uttarakhand	0.6363924549485660	0.3681831875818430	1.0045756425304100
06	Haryana	1.5603771029092000	1.5600889792842000	3.1204660821934000
07	NCT of Delhi	0.0475618312840840	2.2451750234001800	2.2927368546842600
08	Rajasthan	3.7687600956638400	2.0728442152773200	5.8416043109411600
09	Uttar Pradesh	8.5669482806801000	3.9679094724265000	12.5348577531066000
10	Bihar	5.4489906611471800	0.9186765273511560	6.3676671884983400
11	Sikkim	0.0714773441765366	0.0372773245302769	0.1087546687068130
12	Arunachal Pradesh	0.1029956590696970	0.0357643670508818	0.1387600261205790
13	Nagaland	0.1018482258888120	0.0632739341862754	0.1651221600750880
14	Manipur	0.1674090877227090	0.0791392432578743	0.2465483309805830
15	Mizoram	0.0490602359197484	0.0654751036893235	0.1145353396090720
16	Tripura	0.3114677032255470	0.0943130946089838	0.4057807978345310
17	Meghalaya	0.1734994665752500	0.0613580643332892	0.2348575309085390
18	Assam	1.6409106559780300	0.4271960126210260	2.0681066685990600
19	West Bengal	3.6163569453073300	2.8857073284995300	6.5020642738068700
20	Jharkhand	1.2104041901891300	0.6277183093115420	1.8381224995006700
21	Odisha	1.8649942275957400	0.6853089001903730	2.5503031277861100
22	Chhattisgarh	0.8509506257295300	0.4423629523698000	1.2933135780993300
23	Madhya Pradesh	2.8493968500092100	1.8530774658357200	4.7024743158449300
24	Gujarat	2.1547397848935200	3.1517492120745900	5.3064889969681000
25	The Dadra And Nagar Haveli And Daman And Diu	0.0170067286160421	0.0509940264744548	0.0680007550904970
27	Maharashtra	4.1515360998209100	6.4398007348760000	10.5913368346969000
28	Andhra Pradesh	2.6433027749816800	1.6723565398932500	4.3156593148749300
29	Karnataka	3.1202794131386900	3.1711344196351200	6.2914138327738000
30	Goa	0.0904749535444469	0.1631281444259530	0.2536030979704000
31	Lakshadweep	0.0017314107494352	0.0046080423830159	0.0063394531324511
32	Kerala	1.9607798062280500	2.4137072232828900	4.3744870295109400
33	Tamil Nadu	3.4856217277265900	4.5159376994266400	8.0015594271532300

State Wise Sector Wise Weights				
State Code	**State name**	**Rural**	**Urban**	**Combined**
34	Puducherry	0.0534243729859947	0.1204715104724180	0.1738958834584130
35	Andaman And Nicobar Islands	0.0314599375437389	0.0302769604405195	0.0617368979842584
36	Telangana	1.7597387633267100	2.3789266704026600	4.1386654337293800
37	Ladakh	0.0185017378374643	0.0061425789407656	0.0246443167782299
00	All India	55.4192056230062000	44.5807943769934000	100

(Annexure 5.3 d and entire annexure 5.3 can be downloaded by clicking on this link)

Annexure 5.4

(As published on 04.12.2024 and 07.10.2025)

Discussion paper on the treatment of PDS items & other free social transfers in Consumer Price Index Compilation

The Ministry of Statistics & Programme Implementation (MoSPI) is in the process of revising base of the Consumer Price Index (CPI) by updating weights and basket of CPI and introducing possible improvements in the methodology for CPI compilation. To make the index robust, resilient and effective, MoSPI proposes to seek views and suggestions of the users, experts, academicians, Government organisations, State Governments, Financial Institutions and the public at large on the "treatment of free PDS items in Consumer Price Index Compilation".

1. CPI- Introduction and Background

1.1. The Consumer Price Index (CPI) is designed to track changes over time in the general retail prices of a basket goods and services purchased by households for consumption. This "basket" of goods and services includes items from key categories such as food and beverages, clothing, housing, education, medical care, and transportation etc. The Ministry of Statistics and Programme Implementation (MoSPI) compiles the CPI for rural, urban, and combined sectors.

1.2. The CPI series for rural, urban, and combined sectors was initiated by MoSPI in 2011, using 2010 as the base year. The base year acts as a reference point, with the CPI for any given month showing how much prices have risen or fallen compared to that base year. The base year was subsequently revised to 2012.

1.3. CPI for Rural, Urban and Combined sectors, All India Item Index for combined sector and All India and State wise Group/ Subgroup indices are released on 12th of every month at 4.00 pm. In case of holiday on 12th, it is

released on the next working day. Compilation of CPI is done in adherence to

International guidelines and best practices.

1.4. For compiling CPI, Laspeyre's Index Formula is used. This formula is based on three elements:

i. Base year Price: This refers to the average price of all months in the base year.

ii. Base year Weights: Derived from MoSPI's Consumer Expenditure Surveys. For the current series the weights were derived from the2011-12 Consumer Expenditure Survey.

iii. Current Month's Price: Prices collected each month by the Field Operations Division (FOD) of MoSPI for 299 weighted items being captured across 1181 rural markets and 1114 urban markets.

1.5. In order to keep up with the change in consumption patterns every few years, it is important to revise the base year of CPI in every 3-5 years. But, it can only be done after the availability of the results of the Household Consumption Expenditure Survey which provides updated item basket and necessary weights for index compilation. In the light of the launch of the Household Consumption Expenditure Survey (HCES) 2022-23, MoSPI decided to revise the CPI base year from 2012 to 2024. The base revision is under progress.

2. Usage of CPI based Inflation

2.1. Key Indicator for Monetary Policy Decisions:CPI-based inflation is a primary indicator for the Reserve Bank of India for formulating monetary policies to target inflation.

2.2. Deflator for GDP: CPI is used as a deflator to adjust nominal GDP to real GDP, which reflects the true economic growth by accounting for changes in price levels.

2.3. CPI is also used for indexation of wages or contracts and to adjust income tax brackets, social security payments etc.

3. Compilation of CPI

3.1. Bottom up approach is used for compilation of CPI i.e. State level indices are compiled from market level price relatives and State level indices are aggregated to arrive at All India indices. Similarly, group/ subgroup level indices are compiled by aggregating item level indices. The steps involved in compilation of CPI is given below-

3.1.1 Item level Index (Elementary Index)

Item level indices or the elementary indices are compiled for every State by using the following Jevon's Index formula which is Geometric mean of the Price relatives (current month over base year) of all the markets in a State.

$$P_{Ja}^{0t} = \sqrt[m]{\prod_{i=1}^{m} \left(\frac{p_i^t}{p_i^0} \right)} \times 100$$

3.1.2 All India Item Index

All India item indices are compiled by calculating the weighted average of item indices with corresponding weights of items in the States.

3.1.3 State level Group/ Subgroup Indices

State level group/ subgroup indices are compiled by calculating weighted average of State level item indices with the corresponding weights of items in concerned subgroup/ group and state.

3.1.4 All India Group/ Subgroup Indices

All India Group/ Subgroup indices are compiled by calculating the weighted average of group/ subgroup indices with corresponding weights of groups/ subgroups in the States.

4. Base Revision of CPI

4.1. Base revision of CPI for revising the base year of CPI from 2012 to 2024 is under progress. Weights and item basket will be derived from Household Consumption Expenditure Survey (HCES) 2022-23.

4.2. Several modifications are being implemented in the base revision exercise to enhance the robustness and relevance of the new series. These updates aim to align with the latest technological advancements and reflect recent changes in consumption patterns.

4.3. The Base revision of CPI is a comprehensive and detailed exercise in which all the existing processes and methodology will be revisited with the objective of potential improvements. The compilation methodology along-with software will be developed a fresh to incorporate requisite changes. Many improvements and enhancements are proposed in the new CPI series.

5. Issue of treatment of Free Distribution of PDS items in CPI compilation

5.1 The challenge of addressing freely distributed Public Distribution System (PDS) items in the Consumer Price Index (CPI) compilation came into focus with the implementation of a new integrated food security scheme under the National Food Security Act (NFSA). Starting from January 1, 2023, the Central Government initiated this scheme to provide free food grains for one year to beneficiaries under the Antyodaya Anna Yojana (AAY) and Priority Households (PHH) categories.

5.2 There are two challenges in the free distribution of PDS items in the context of CPI compilation-

i. Mid-Series Adjustments: How to address the reduction in the price of PDS items from a positive value to zero or increase in prices of PDS items from zero to some positive amount during an ongoing series?

ii. Inclusion in CPI basket at the start of series: Should the free PDS items be included in the CPI basket?

5.3 Treatment in case of reduction in the price of PDS items from a positive value to zero:

5.3.1 In the existing series, in the State/UTs where free distribution scheme is implemented for all sections of the society (i.e. APL, BPL and AAY), the weights of these items are pro-rata distributed on the other items of the section (i.e. major cereals and products) within the State/UT.

5.3.2. This is one of the three methods prescribed in theConsumer Price Index Manual: Concepts and Methods 2020 (page 35) in case, if the price of social security transfers decreases from some positive amount to zero.

5.3.3. However, concerns were raised regarding the approach used to incorporate for this free distribution in the CPI compilation. It was argued that the adopted method doesn't accurately capture the impact of free food grain distribution on inflation.

5.3.4 The following three methods prescribed in theConsumer Price Index Manual: Concepts and Methods 2020 (page 35) to deal with the cases where price of social security transfers decreases from some positive amount to zero-

Method 1: To use a zero price and adjust the weight during next update. (Proposed for new series of CPI)

Method 2: To re-distribute the weight to the other items within the class/ section. (Adopted in the existing series)

Method 3: To re-distribute the weight broadly over all the items of the basket.

5.4 Inclusion of freely distributed PDS items in CPI basket at the start of the series:

5.4.1 In the existing series, if an items expenditure share is not available due to free distribution (since the out of pocket expenditure is zero), it will not have any positive weight and further the Base price and Current price for such items will also be zero. Hence such items are excluded from the item basket. This treatment of free social transfers is in line with the international best practices.

5.4.2 In this regard, the IMF's CPI Manual Concepts and Methods 2020 para 2.60 may be seen below:

"The expenditure on social transfers in kind is incurred by the governments or nonprofit institutions that pay for them, and not by the households that consume them. It could be decided that the CPI should be confined to final consumption expenditure incurred by households, in which case free social transfers in kind would be excluded from the scope of the index. Even if they were to be included, they can be ignored in practice when they are considered to be provided free, on the grounds that households incur zero

expenditure on them. Of course, their prices are not zero from the perspective of the units that finance the social transfers, but the relevant prices for a CPI are those payable by the households."

5.4.3 Further, IMF's CPI Manual Concepts and Methods 2020 vide para 2.72 may also be seen below:-

"If the main reason for compiling a CPI is the measurement of inflation or as an input into monetary policy decisions, the scope of the index should be restricted to monetary transactions only, especially since non monetary transactions do not generate any demand for money…"

Keeping into consideration the definition of CPI (i.e. price change over a period of time of the goods and services purchased by the Household) and the methodology used for compiling index as explained above, views and suggestions are invited on this issue latest by 31st December, 2024.

*****

Ministry of Statistics and Programme Implementation (MoSPI)

Discussion paper 2.0 on the Treatment of free PDS Items in Consumer Price Index (CPI) Compilation

The Ministry of Statistics and Programme Implementation (MoSPI) is currently undertaking a revision of the Consumer Price Index (CPI) with the objective of updating item weights, revising the consumption basket, and incorporating methodological improvements to strengthen the index. At present, the CPI is compiled every month on the basis of price data collection from 1181 rural markets and 1114 urban markets across the country.

To make the index more robust, resilient and effective, MoSPI invites views and suggestions from experts, academicians, government bodies, state governments, financial institutions and other stakeholders on the treatment of items distributed free of cost through the Public Distribution System (PDS) in the CPI compilation framework. This is in continuation to the brainstorming session on the treatment of PDS items in CPI on 20th November, 2024 with eminent economists, academic experts, practitioners, representatives of the Reserve Bank of India, other financial institutions and media followed by the discussion note published by MoSPI in December, 2024.

Consumer Price Index: Background

The Consumer Price Index (CPI) measures changes in the general level of retail prices of a representative basket of goods and services consumed by households. The basket includes items across major categories such as food and beverages, clothing, housing, education, healthcare, and transportation.

MoSPI compiles CPI for rural, urban, and combined sectors at both all-India and state/UT levels. The current CPI series was introduced in 2011 with base year 2010, subsequently revised to 2012. CPI indices are released on the 12th of every month at 4:00 PM, or on the next working day in case of 12th being a holiday. The compilation adheres to internationally recognized guidelines and best practices.

The CPI is compiled using the Young Index (Modified Laspeyres index formula), which incorporates three essential elements:

- Base year prices: Average prices across all months of the base year.
- Base year weights: Derived from the Household Consumer Expenditure Survey. The current series uses data from the 2011–12 survey.
- Current prices: Collected monthly by MoSPI's Field Operations Division (FOD) for 299 weighted items across 1,181 rural and 1,114 urban markets.

With the release of HCES 2023-24, MoSPI has initiated the process of revising the CPI base year from 2012 to 2024.

Usage of CPI

The inflation data based on the CPI compiled by MoSPI is a key economic indicator with multiple applications:

- Monetary policy: CPI-based inflation is the principal indicator used by the Reserve Bank of India for monetary policy decisions and monitoring price stability.
- Policy Interventions: CPI data is also used for designing policy and social sector welfare schemes by various Central Government Ministries and Departments.
- National accounts: CPI serves as a deflator to adjust nominal GDP to real GDP, thus capturing actual economic growth net of inflationary effects.
- Wage and contract indexation: CPI is employed for revising wages, updating tax brackets, adjusting social security payments, and for escalation clauses in contracts.

The issue of how to appropriately reflect free distribution of PDS items in CPI has become more relevant following the recent policy changes under National Food Security Act (NFSA). Starting 1 January 2023, the Central Government implemented Pradhan Mantri Garib Kalyan Anna Yojana (PMGKAY), an integrated food security scheme to provide free food grains to eligible households for one year. As per the scheme, about 75% of rural population and 50% of the urban population is provided free food grains across India.

This development raises two methodological challenges:

1. Mid-series adjustments: How should CPI reflect a situation where the price of a PDS item reduces from a positive value to zero, or conversely increases from zero to a positive value, during the lifetime of an ongoing CPI series?

2. Inclusion in the CPI basket at the start of a new series: Should items that are distributed entirely free of cost be included in the CPI basket at all, given that households incur no direct monetary expenditure on them?

Issue I: Treatment in case of reduction in the price of PDS items from a positive value to zero:

In the current CPI series, 'Rice (PDS)' and 'Rice (other sources)' are treated as distinct items under the section 'Major Cereals and Products', each assigned separate weights and compiled as individual indices. In States and Union Territories where rice is distributed free of cost to all household categories—namely APL, BPL, and AAY—the weights originally allocated to these items are redistributed proportionally across the remaining items within the same section at the State/UT level.

This is one of the three methods prescribed in the Consumer Price Index Manual: Concepts and Methods 2020 (page 35) in case the price of social security transfers decreases from some positive amount to zero.

However, concerns were raised on the methodology as it did not reflect the appropriate changes in the inflation due to reduction in PDS prices.. It was argued that the adopted method doesn't accurately capture the impact of free food grains distribution on inflation.

Following are the three methods prescribed in the Consumer Price Index Manual: Concepts and Methods 2020 (page 35) to deal with the cases where price of social transfers decreases from some positive amount to zero-

Method 1: Use a zero price and adjust the weight during the next update. (Proposed for new series of CPI)

Method 2: To re-distribute the weight to the other items within the class/ section. (Adopted in the existing series)

Method 3: To re-distribute the weight broadly over all the items of the basket.

Therefore, to address this issue in the new CPI series, it is proposed to adopt the Method 1 i.e. when price under social transfers decreases from some positive amount to zero i.e. use a zero price and adjust the weight during the next update.

Issue 2: Inclusion of freely distributed PDS items in CPI basket in updated CPI series:

In the existing CPI series, items that are distributed free of cost do not carry any expenditure share, since households incur zero out-of-pocket spending on them. Consequently, such items receive no positive weight, and both their base and current prices are recorded as zero. As a result, they are excluded from the CPI basket. This treatment of free social transfers is consistent with established international practice.

The IMF's CPI Manual: Concepts and Methods (2020) provides guidance in this regard. Paragraph 2.60 notes:

"The expenditure on social transfers in kind is incurred by governments or nonprofit institutions that pay for them, and not by the households that consume them. It could be decided that the CPI should be confined to final consumption expenditure incurred by households, in which case free social transfers in kind would be excluded from the scope of the index. Even if they were to be included, they can be ignored in practice when they are considered to be provided free, on the grounds that households incur zero expenditure on them. Of course, their prices are not zero from the perspective of the units that finance the social transfers, but the relevant prices for a CPI are those payable by the households."

Further, paragraph 2.72 clarifies:

"If the main reason for compiling a CPI is the measurement of inflation or as an input into monetary policy decisions, the scope of the index should be restricted to monetary transactions only, especially since non-monetary transactions do not generate any demand for money."

These principles suggest the exclusion of free items from CPI when the index is primarily intended for inflation measurement and monetary policy. Further, it is based on practices prevalent in Western countries, where scale of such social transfers may be miniscule. In India, not only the scale of social transfer is huge, it impacts the market price of such items also. However, in India, the CPI serves a dual purpose: it is not only the principal indicator for monetary policy formulation by the Reserve Bank of India, but also widely used as a proxy for tracking changes in the cost of living and for indexation of wages, pensions, and formulation of social welfare schemes.

Given this dual role, and considering the extensive coverage and policy significance of India's free food distribution programme under PDS, disussions were held in the meetings with the IMF, World Bank and UNECE's Group of Expert on CPI and MoSPI's Expert Group on the Base revision of CPI. Experts were of the view that considering the scale and impact on household consumption patterns and taking into account the purpose of CPI (not restricting to monetary policy only), free PDS items should be appropriately accounted for within the Indian CPI framework. Since any change in the CPI methodology in the mid of the series is considered as break in series, it is essentially important to think through all the possible cases which may arise in future.

Proposed methodology for index compilation including PDS free and subsidized:

Keeping in view the above observations and to ensure the robustness and effectiveness of CPI series throughout its life, a methodology is developed by MoSPI. The proposed methodology will be valid for all food items distributed through PDS. The methodology considers the prices from all three categories: free distribution, Public Distribution System (PDS), and open market transactions. It is important to note that as per base prices captured in CPI, the state-level variations exist in terms of distribution of subsidized and free items through PDS. Some states currently provide rice exclusively through free distribution, others only at subsidized rates, and in certain cases, both free and subsidized rice are distributed through PDS. These variations may further change over time during the life of the series. Therefore, the proposed methodology is drafted taking into consideration all possible scenarios in future These cases are summarized as under;

a. A state currently distributing free food item through PDS may decides to charge a subsidized amount for the same i.e. price variation from zero to some positive amount

b. A State not distributing the food item free through PDS may decide to distribute it for free through PDS i.e. price variation from some positive amount to zero

c. Both free food items and subsidized items are distributed in the State through PDS system but both are stopped.

d. Both free food and subsidized food items are not distributed in the State but in future the State started distributing one or both during the mid of the series.

All these cases can be handled by considering the average PDS price for each state for the compilation purpose which are as under;

Item PDS	Period				
	0	1	2	3	4
Free	0	0	0		0
Subsidised	5	5	5	5	
Average *	2.5	2.5	2.5	5	0
				Rice available Only at subsidised prices	Only free rice available

*- Average is taken as weighted AM using quantity shares available from the HCES. In this example for easy understanding weight has been assumed to be 50% each.

Moreover, if price data is available for various PDS categories—such as APL, BPL, AAY, SFSS, PHH, and others—the overall PDS price for a state will be calculated as a weighted average of these category within that state.

Since the method of price relative cannot be used due to the existence of '0' value, the basic Laspeyres Price Index Formula may be used for the compilation of the Index using two items rice PDS and rice other sources.

$$\text{Index}=(\Sigma(P1 * Q0) / \Sigma(P0 * Q0)) * 100$$

Here "Q0" will be the share of the quantity derived from the HCES data.

For PDS rice the average price of PDS can be calculated as explained above. But in the case of rice other sources prices are collected from multiple markets within a state. Further the specification including quantity, variety, brand, quality etc. may vary from market to market. The best single value for rice other sources is the elementary index of the rice other sources. It may be noted that the monthly elementary index captures the monthly price change for the item rice other sources clearly.

Accordingly, index of rice (Rice other source and PDS Combined) can be calculated as below-

		Price for the periods									
Item PDS	**Weight**	**0**	**1**	**2**	**3**	**4**	**p0q0**	**p1q0**	**p2q0**	**p3q0**	**p4q4**
PDS	46	2.5	2.5	2.5	5	0	115	115	115	230	0
Other sources	54	100	101	101	102	102	5400	5454	5454	5508	5508
Total	100						**5515**	**5569**	**5569**	**5738**	**5508**
Index							**100**	**100.98**	**100.98**	**104.04**	**99.87**
Inflation								0.98	0	3.03	-4.01

Here the weights are the share of the quantity consumed by the households as per HCES 2023-24. In the above table it can be seen that the issue of 0 price can be addressed properly in the calculation of Rice index without muting the prices or distorting the index. Please note that the index value and prices used above are for illustration purposes only.

Further, in case there is no distribution of PDS items in a particular state, the above methodology will actually return the index of the rice other sources only.

In the above methodology, for PDS, the actual price values are used, whereas for rice from other sources, index values are used for compiling the index. Therefore, instead of index of rice other sources, using its price level would provide a clearer and more accurate index.

This can be achieved by identifying a suitable division factor (say c) that transforms the index value into one that approximates the average rice price per unit. Then the price used for Rice other sources = Index/c. To calculate the value of c any of the following may be used:

Option 1: c = 100/average price from HCES 2023-24

Option 2: c = 100/average price per unit from Base prices

Option 3: actual average monthly prices in place of the index; this may present practical challenges, particularly in instances where quality adjustments are required due to changes in item specifications.

The option 2 appears the most appropriate.

If c = 1.8 then the calculation of rice index will be as follows

Period	0	1	2	3	4
Rice other sources Index	100	101	101	102	102
Index/c	55.56	56.11	56.11	56.67	56.67

Item PDS	Weights	Price for the periods									
		0	1	2	3	4	p0q0	p1q0	p2q0	p3q0	p4q4
PDS	46	2.5	2.5	2.5	5	0	115	115	115	230	0
Other sources(Index/c)	54	55.56	56.11	56.11	56.67	56.67	3000.24	3029.94	3029.94	3060.18	3060.18
Total	100						3115.24	3144.94	3144.94	3290.18	3060.18
Rice Index							100	100.9534	100.9534	105.6156	98.23256
Rice Inflation								0.95	0	4.62	-6.99

In the current series, separate indices are compiled for 'Rice (PDS)' and 'Rice (other sources)', allowing for disaggregated analysis. In the new series a unified index for 'Rice', combining both PDS and non-PDS sources will be published as Index for Rice (PDS) is of not much importance as it is regulated by the Governments. It may be noted that the same methodology will be adopted for all PDS items.

Consultations on the methodology: The proposed methodology was also discussed with the IMF expert in the Technical Assistance Mission held during 11th to 14th August. The IMF Expert was of the view that the proposed method does not mute price changes for rice, wheat and other items distributed through PDS. It would fully reflect price changes should nominal prices be introduced for the PDS products. The methodology does not overstate or distort price changes.

Accordingly, feedback/comments are invited on the proposed methodology for handling PDS items in CPI compilation. Comments and suggestions may be sent to psd-nso2020@mospi.gov.in by 22nd October, 2025

*****

Annexure 5.5

(As published on 30.10.2025)

Discussion paper on the proposed changes in the Housing index compilation methodology in the new CPI series

Importance of Housing in Indian CPI

The Consumer Price Index (CPI) is a key macro-economic indicator for measuring price changes of goods and services consumed by the households over time. Inflation based on CPI is the year on year change in the CPI. The Housing is a crucial indicator of the overall well-being of the households not only in India but across the world as a significant amount of their income is spent either on house rent or maintaining an owned house. It is considered an important factor for the economy as it affects household budgets and influences the construction and real estate sectors. High house rents can strain household finances which may in turn reduce the spending on other requisite goods and services. Therefore, inflation based on house rent index is an important tool not only for the policy and decision makers but also for the households.

In India, one of the key components of the existing CPI series is housing as it has 21.67% expenditure share for urban areas and 10.07% expenditure share at All India level in the existing CPI series. Currently, the housing index is not compiled in the rural sector mainly because Household Consumption Expenditure Survey (HCES) 2011-12 did not provide the estimates of the imputed rent for owner occupied houses for this sector. Further, as per HCES (2011-12), the actual house rent expenditure accounted for only 0.44% of the total rural consumption expenditure. Further, the rental equivalent approach also could not be adopted due to non-availability of rent market.

2.Housing Index compilation Methodology for the existing CPI series

2.1 In the existing series of CPI, the owner-occupied dwellings are also taken into account in the computation of housing index besides rented dwellings. The “Rental Equivalent

Approach" was adopted to impute the rent of owner-occupied houses. The rent data are collected from the sample rented dwellings in each of the selected towns. For each quotation, twelve rented dwelling units were selected. These were selected in such a way that they represented various categories of dwellings with different number of living rooms. Dwellings are visited once in six months for canvassing house rent schedule which means the dwellings covered in the month of January for collection of information are visited in the month of July again. Similarly, dwellings covered in February are covered again in August and so on. This arrangement was made to reduce the workload of enumerators in collection of information. Moreover, rent does not change very frequently like prices of cereals, vegetables, fruits etc. In case of concessional or subsidized dwellings like dwellings provided by the employer, the rent actually paid by the family for the dwelling along with any allowance foregone in lieu of the accommodation given to the owner is taken as rent payable per month. The selected dwellings are substituted during the course of the series. Substitution generally occurs when a dwelling is no longer available for rent, its category changes due to reconstruction or other structural modifications and in a few cases due to non-cooperation of the respondents. 7%-10% of dwellings are substituted in a year.

2.2 For compilation of housing index, rent data for six months' period were required as each sample dwelling was visited once in six months for data collection. Therefore, for the period January 2013 to May 2013, housing indices were kept at 100. First Housing Index on Base 2012=100 was compiled for the month of June 2013, for which, house rent data from January 2013 to June 2013 was used. February 2013 to July 2013-house rent data was used for July 2013 house rent index and so on. For computing House Rent Index, Rent Relatives were calculated as (current month rent)/ (Base rent) and then GM of the Rent Relatives was worked out by classifying the dwellings by number of living rooms (i.e. one room, two rooms, three rooms and four or more rooms). Weighted geometric mean (GM) of the aforementioned average rent relatives was taken to get the Housing Index. Here weights for each category of dwellings was obtained from the NSS 69th round

survey on Housing Conditions (July-December 2012). This fixed base method was Continued up to November 2013. Subsequently, the Housing Indices were computed using Chain Base Method where Rent Relatives (RR) were computed as (current month rent)/ (rent six months ago) and then GM of Rent Relatives was worked out by classifying the dwellings by number of living rooms (one room, two rooms, three rooms and four or more rooms). Weighted GM of the aforementioned average rent relatives was taken to get a combined rent relative. Housing index was obtained by multiplying the combined rent relative with the corresponding House Rent Index six months ago.

2.3 Base Rent computation for the existing CPI series

Let $x_1, x_2 \ldots$, **and** x_6 were the rent collected for dwellings allocated to January to June of the Base year and x_7, **…..** **and** x_{12} represented the rent collected for July to December during a second visit. So the Base rent were computed as $(x_1 + x_7)/2$, $(x_2 + x_8)/2$, **... and** $(x_6 + x_{12})/2$ **for January, February ……and June respectively.**

2.4 Index Compilation -Current Year (2013 onwards)

It may be noted that the complete set of rent values was unavailable until May of the initial year, as rent was collected for only **1/6th** of the total dwellings each month. Therefore, a full set of **Current Year Rent** was available for compilation after June of the initial year.

This means that for January, the current year's rent will be available for **1/6th** of the total dwellings.

During February, rent data for **2/6th** of the dwellings ($1/6^{th}$ from January and $1/6^{th}$ from February) will be available.

Similarly, by May, rent data for **5/6th** of the dwellings ($1/6^{th}$ from each month from January to May) will be collected.

However, only after June of the initial year, the complete set of current rent values for all dwellings will be available.

Therefore, **Index for January, February, ….and May** was taken as **100.**

For June, rent for 2013 for all the dwellings was available for the first time.

Index for June = Rent June/Base rent *100.

Where rent June 2013 contained all the data from January to June (Complete set).

Index for July = Rent July/Base rent *100.

Where rent July contains all the data from February to July.

This was followed till Nov, wherein

Index for Nov= Rent Nov/Base rent *100.

Where rent November contains all the data from June to November.

The chain index for Housing was started from December (2013) onwards:

Index for December = Rent December/Base rent *100.

= Rent December/ Rent June * Rent June/ Base rent *100

= Rent Relative*Index six month ago

2.5 Rent relative calculation for the existing series

Let us suppose, there are five States in the country. As per current index compilation procedure, all elementary indices, including Housing index, are compiled State-wise and then aggregated to arrive at all India level index.

2.5.1 Rent data are collected from rented accommodations only. Therefore, the sample contains only rented accommodations. Dwellings, in the sample, have been divided into -four categories, using the criteria of number of living rooms:

I - one living room set
II - two living rooms set
III - three living rooms set
IV - four or more living rooms set

2.5.2. Let N_{ij} is the number of dwellings in category *i* of dwellings in State *j* in the sample. Further, assume that R^C is current rent, R^{-6} is rent six months ago and RR (Rent Relative) is ratio of R^C and R^{-6}. Then RR_{ij} represents geometric mean of the rent relatives of the rented dwellings in category *i* of dwellings in State j, which are depicted in the matrix below:

States	Category I	Category II	Category III	Category IV
States 1	RR_{I1}	RR_{II1}	RR_{III1}	RR_{IV1}
States 2	RR_{I2}	RR_{II2}	RR_{III2}	RR_{IV2}

States 3	RR_{I3}	RR_{II3}	RR_{III3}	RR_{IV3}
States 4	RR_{I4}	RR_{II4}	RR_{III4}	RR_{IV4}
States 5	RR_{I5}	RR_{II5}	RR_{III5}	RR_{IV5}

2.5.3 Weights/shares of these categories of dwellings within owner-occupied and rented houses (as per the results of Housing Condition Survey NSS 69th Round) were supposed as follows:

State	Rented accommodations				Owner-occupied accommodations			
	Cat- I	**Cat- II**	**Cat- III**	**Cat- IV**	**Cat- I**	**Cat- II**	**Cat- III**	**Cat- IV**
States 1	A_{I1}	A_{II1}	A_{III1}	A_{IV1}	B_{I1}	B_{II1}	B_{III1}	B_{IV1}
States 2	A_{I2}	A_{II2}	A_{III2}	A_{IV2}	B_{I2}	B_{II2}	B_{III2}	B_{IV2}
States 3	A_{I3}	A_{II3}	A_{III3}	A_{IV3}	B_{I3}	B_{II3}	B_{III3}	B_{IV3}
States 4	A_{I4}	A_{II4}	A_{III4}	A_{IV4}	B_{I4}	B_{II4}	B_{III4}	B_{IV4}
States 5	A_{I5}	A_{II5}	A_{III5}	A_{IV5}	B_{I5}	B_{II5}	B_{III5}	B_{IV5}

Where $\sum^{IV}_{i=i} Aij = 100$ and $\sum^{IV}_{i=i} B_{ij} = 100$, for state j.

2.5.4. Thus, weighted average of the category-wise rent relatives for rented and owner-occupied accommodations is as follows:

State	Rented	Owner-occupied
States 1	R_1= weighted GM of RR_{i1}, where weight A_{i1}	O_1= weighted GM of RR_{i1}, where weight B_{i1}
States 2	R_2= weighted GM of RR_{i2}, where weight A_{i2}	O_1= weighted GM of RR_{i2}, where weight B_{i2}
States 3	R_3= weighted GM of RR_{i3}, where weight A_{i3}	O_1= weighted GM of RR_{i3}, where weight B_{i3}
States 4	R_4= weighted GM of RR_{i4}, where weight A_{i4}	O_1= weighted GM of RR_{i4}, where weight B_{i4}
States 5	R_5= weighted GM of RR_{i5}, where weight A_{i5}	O_1= weighted GM of RR_{i5}, where weight B_{i5}

It may be noted that the Rent Relative of rented accommodation is applied to the respective category of owner-occupied dwellings also, using rental equivalence approach, to compute weighted average of the category-wise rent relatives for owner-occupied accommodations.

2.5.6. Now the overall rent relative is computed as follows:

State	Overall Rent Relative
States 1	Y_1= weighted GM of R_1 & O_1, where weight are w_1 & $(1-w_1)$
States 2	Y_2= weighted GM of R_2 & O_2, where weight are w_2 & $(1-w_2)$
States 3	Y_3= weighted GM of R_3 & O_3, where weight are w_3 & $(1-w_3)$
States 4	Y_4= weighted GM of R_4 & O_4, where weight are w_4 & $(1-w_4)$
States 5	Y_5= weighted GM of R_5 & O_5, where weight are w_5 & $(1-w_5)$

where w_j was computed from the result of HCES 2011-12. Here, w_j represents the share of expenditure.

2.6. **Compilation of State wise and All India Housing index**

2.6.1 Using methodology mentioned above, the State-wise Housing Index (HRI) is computed, following chain base method, as follows:

State	House Rent Index
States 1	$HRI_1 = HRI^{-6}{}_1 . Y_1$
States 2	$HRI_2 = HRI^{-6}{}_2 . Y_2$
States 3	$HRI_3 = HRI^{-6}{}_3 . Y_3$
States 4	$HRI_4 = HRI^{-6}{}_4 . Y_4$
States 5	$HRI_5 = HRI^{-6}{}_5 . Y_5$

Where $HRI^{-6}{}_j$ is the Housing Index of six months ago of State *j*.

2.6.2 Following this procedure, State-wise House Rent Indices are compiled, which were further aggregated to arrive at all India Housing Index. For compilation of All India Housing index, the corresponding housing weights of the respective States are used.

3. Limitations identified by the users and experts in the existing housing index compilation methodology

The stakeholders and users of CPI data highlighted some anomalies in the existing Housing index compilation methodology which are as under;

3.1 **There are three different methods used to calculate the index:**

- From January to May 2013, the index was set to 100.
- From June to November 2013, a fixed base method was used.
- From December 2013 onwards, a chain index method was applied.

It was observed that **a sharp rise in both the index and inflation occurred following May 2013**, resulting in a **sudden upward shift**. This escalation was due to the assumption of index as 100 till May 2013.

3.2 From December 2013, the chain index was based on six months prior data which introduced an unexplainable movement in the monthly housing inflation rates.

3.3 The issue of some distortions in some months, introduced due to concessional or employer provided dwellings, was also highlighted by the users including the Reserve Bank of India. In the case of employer-provided accommodation, information is collected on House Rent Allowance (HRA) and any other license fees paid by the employee to retain the dwelling. When an employee's salary increases, the corresponding rise in HRA is reflected in the recorded house rent, thereby capturing an increase. However, when the employee vacates the accommodation and it is allotted to a junior employee with a lower HRA, it results in a lower recorded rent, which may incorrectly appear as a decline in rent or negative inflation. This, however, does not represent an actual decrease in rent prices.

3.4 During a Technical Assistance Mission on base revision of CPI with IMF Experts, it was advised that since India uses the panel survey approach for the collection of rents, when calculating price change, the price change is based on a comparison of like with like, meaning that panel 1 in M7 is compared with the prices collected in M1. This results in a six-month change. To convert the 6 months, change into a one-month change, the 6^{th} root of the change may be calculated. This is then multiplied by the previous period index. Prices for the other panels are not imputed or used. Only the prices of the individual panels are used subject to the condition that each panel is broadly representative of the whole. Carrying forward the prices of the other panels may create a downward bias in the rent index.

4. Proposed Changes and Methodology for Compilation of the House Rent Index in the New Series

In the ongoing base revision exercise, all aspects of index compilation methodology are revisited to prepare a more robust and resilient CPI series. To address issues highlighted by the users and experts as mentioned in para 3 above, the housing index compilation methodology is proposed to be revised significantly. The methodology is reviewed under the guidance of the "Expert Group on the Base Revision of CPI". Proposed changes in the housing index compilation methodology are as follows:

4.1 Frequency and Coverage of Rent Collection

- **Monthly Rent Collection**: Rent data will be collected **monthly**, replacing the current practice of collecting rent every six months.
- **Expanded Sample Coverage**: Instead of limiting rent collection to **one-sixth of the sample**, the new approach proposes collecting rent data from **all selected dwellings** each month. It is being proposed to address the issue of panel approach highlighted by the IMF expert at para 3.4 above, since the panel approach necessitates a larger sample size to ensure representativeness at the aggregate level, which is not feasible due to the limited availability of rented dwellings in many markets outside major urban centres

4.2 Inclusion of Rural Sector: In addition to urban expenditure on housing, the HCES 2023–24 has also captured house rent data for rural areas, including imputed rent for owner-occupied dwellings. Consequently, the new series will compile the Housing Index for both rural and urban sectors. This marks a departure from the current series, which includes only the urban sector, due to the absence of imputed rent data for rural areas in the HCES 2011–12.

4.3 Sampling Framework

- **Urban Sector**: Rent data will be collected from 12 dwellings per urban market, subject to the availability of rented units.
- **Rural Sector**: In selected villages, data will be collected from 6 dwellings, based on availability.

4.4. Exclusion of employer provided dwellings.

To eliminate distortions introduced sometimes due to concessional or employer provided dwellings as mentioned in para 3.3 above, in the proposed CPI series, government accommodations and other employer-provided dwellings will be excluded from the compilation of the Housing Index, as these do not reflect transactions in the actual rental market.

4.5. Classification and Weighting of Dwellings

As in the existing series, dwellings will be categorized by the number of living rooms:

- Category 1- Dwellings with 1 living room
- Category 2- Dwellings with 2 living rooms
- Category 3- Dwellings with 3 living rooms
- Category 4- Dwellings with 4 or more living rooms

The weights assigned to each dwelling category will be based on the proportions obtained from the Census 2011 data.

4.6 Compilation Methodology

4.6.1 In the new CPI series, it is proposed to compile the Housing Index by treating the Categories as a priced item and compile index category wise in a state * sector wise. Then compile the weighted average will be the index.

4.6.2. Let N_{ij} is the number of dwellings in category *i* of dwellings in State *j* in the sample. Further, assume that R^C is current rent, R^{-1} is rent six months ago and RR (Rent Relative) is ratio of R^C and R^{-1}. Then RR_{ij} represents geometric mean of the rent relatives of the rented dwellings in category *i* of dwellings in State j, which are depicted in the matrix below:

States	Category I	Category II	Category III	Category IV
States 1	RR_{I1}	RR_{II1}	RR_{III1}	RR_{IV1}
States 2	RR_{I2}	RR_{II2}	RR_{III2}	RR_{IV2}
States 3	RR_{I3}	RR_{II3}	RR_{III3}	RR_{IV3}
States 4	RR_{I4}	RR_{II4}	RR_{III4}	RR_{IV4}
States 5	RR_{I5}	RR_{II5}	RR_{III5}	RR_{IV5}

4.6.3. P_{ij} represents Priced item Index of the of the rented dwellings in category *i* of dwellings in State j, which is the **product** of **Geometric mean of rent relative** and **Priced item index of previous month** in category *i* of dwellings in State j(formula for the short term formula or Chain index).

i.e., $P_{ij}^c = RR_{ij} * Pij^{-1}$

States	Category I	Category II	Category III	Category IV
States 1	P_{I1}	P_{II1}	P_{III1}	P_{IV1}
States 2	P_{I2}	P_{II2}	P_{III2}	P_{IV2}
States 3	P_{I3}	P_{II3}	P_{III3}	P_{IV3}
States 4	P_{I4}	P_{II4}	P_{III4}	P_{IV4}
States 5	P_{I5}	P_{II5}	P_{III5}	P_{IV5}

4.6.4. Let us suppose weights/shares of these categories of dwellings within owner-occupied and rented houses (as per the Census 2011 data) are as follows:

State	Rented accommodations				Owner-occupied accommodations			
	Cat- I	**Cat- II**	**Cat-III**	**Cat-IV**	**Cat- I**	**Cat- II**	**Cat-III**	**Cat-IV**
States 1	A_{I1}	A_{II1}	A_{III1}	A_{IV1}	B_{I1}	B_{II1}	B_{III1}	B_{IV1}
States 2	A_{I2}	A_{II2}	A_{III2}	A_{IV2}	B_{I2}	B_{II2}	B_{III2}	B_{IV2}
States 3	A_{I3}	A_{II3}	A_{III3}	A_{IV3}	B_{I3}	B_{II3}	B_{III3}	B_{IV3}
States 4	A_{I4}	A_{II4}	A_{III4}	A_{IV4}	B_{I4}	B_{II4}	B_{III4}	B_{IV4}
States 5	A_{I5}	A_{II5}	A_{III5}	A_{IV5}	B_{I5}	B_{II5}	B_{III5}	B_{IV5}

Where $\sum^{IV}_{i=i} Aij = 100$ and $\sum^{IV}_{i=i} B_{ij} = 100$, for state j.

4.6.5. Thus, the Index for Rented dwellings and Owner-occupied dwellings are the weighted average of the category-wise priced index for rented and owner-occupied accommodations which is as follows:

State	Rented	Owner-occupied
States 1	R_1= weighted AM of $P_{i1,}$ where weight A_{i1}	O_1= weighted AM of $P_{i1,}$ where weight B_{i1}

States 2	R_2= weighted AM of $P_{i2,}$ where weight A_{i2}	O_2= weighted AM of $P_{i2,}$ where weight B_{i2}
States 3	R_3= weighted AM of $P_{i3,}$ where weight A_{i3}	O_3= weighted AM of $P_{i3,}$ where weight B_{i3}
States 4	R_4= weighted AM of $P_{i4,}$ where weight A_{i4}	O_4= weighted AM of $P_{i4,}$ where weight B_{i4}
States 5	R_5= weighted AM of $P_{i5,}$ where weight A_{i5}	O_5= weighted AM of $P_{i5,}$ where weight B_{i5}

Note: Price index of rented accommodation (Pij) is applied respective category of owner-occupied dwellings also, using rental equivalence approach, to compute weighted average of the category-wise rent relatives for owner-occupied accommodations. It may be noted that Rent or rates are not collected independently from households that occupy their own dwellings.

4.6.7. Now the overall House rent Index for the state is computed as follows:

State	Overall House rent
States 1	HR_1= weighted AM of R_1 & O_1, where weight are w_1 & w_{1*}
States 2	HR_2= weighted AM of R_2 & O_2, where weight are w_2 & w_{2*}
States 3	HR_3= weighted AM of R_3 & O_3, where weight are w_3 & w_{3*}
States 4	HR_4= weighted AM of R_4 & O_4, where weight are w_4 & w_{4*}
States 5	HR_5= weighted AM of R_5 & O_5, where weight are w_5 & w_{5*}

where w_j has been computed from the result of HCES round. Here, wj and wj* represents the share of expenditure for rented dwelling and owner-occupied dwellings respectively for state j.

5. Following is the summary of changes proposed in the housing index compilation in the new CPI series;

Parameters	Existing series	Proposed in the new series
Coverage	Only urban areas	Urban & rural both
	12 dwellings per market (as per availability)	Urban – 12 dwellings per market(as per availability)Rural - 6 dwellings per market (as per availability)
	Panel approach for capturing rents from all dwellings in 6 months	Rent data will be captured from all dwellings for every month
	Employer provided accommodation included	Employer provided accommodation not included
Methodology	3 methods are used to compile the index for different different periods.	Only one method will be used from the beginning as done for other items in the basket, which is short index or chain index method
Higher level indices	Weighted Geometric mean of elementary indices	Weighted Arithmetic mean of elementary indices (in line with other items in CPI)
Source for dwelling type weights	Housing Condition Survey - NSS 69th round	Census 2011
Release of Housing index	All India and urban	All India, urban and rural

The proposed changes in the methodology are being done with the objective of making housing index more robust and representative. F**eedback/comments are invited** on the proposed changes in housing index compilation methodology. Comments and suggestions may be sent to **psd-nso2020@mospi.gov.in by 20th November, 2025**

*****

Annexure 5.6

Government of India
Ministry of Statistics and Programme Implementation
National Statistical Office
Price Statistics Division

Subject: Minutes of the first meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The first meeting of Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairpersonship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 20th April, 2023 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at the **Annexure-I**.

2. At the outset, the Chairperson welcomed the participants and apprised the EG members about the Expert Group for Base Revision of CPI and its mandate. Thereafter, ADG (PSD) addressed the Expert Group and shared following agenda points to be discussed in the meeting:

i. Sample design, sample list and list of items for Market Survey
ii. Timelines for launching Market Survey
iii. Issues related to Market Survey as observed in the present series
iv. Any other matter with the permission of the Chairperson

The detailed agenda note of the meeting which was circulated to all the members of the expert groups is attached at **Annexure-II**. The proposed sampling design for selection of rural and urban markets for price collection work for the new series of Consumer Price Index circulated with agenda is also attached at **Annexure-III.**

3. PSD team made an elaborate presentation regarding the constitution of Expert Group & its Terms of References (ToRs), salient features of the existing CPI series, the proposed sampling design and some limitations/issues of existing series to be addressed in the revised series. The EG was also apprised that the updated data of Population Census 2011 has been used by NSO for selecting the rural and urban households for conducting the Consumer Expenditure Survey 2022-23. ADG (SDRD) informed that two back-to-back Consumer Expenditure Surveys will be conducted

by NSO, MoSPI during 2022-23 and 2023-24. The EG members discussed threadbare each agenda, especially sample design. The deliberations during the meeting were as under:

3.1. Proposed sample design for selection of villages for rural price collection for Consumer Price Index:

PSD team made a detailed presentation on sampling design for selection of villages for price collection work of Consumer Price Index. Details of the proposed sampling design are given at para 1.2 of Annexure-III.

3.1.1 The EG deliberated on the issue of selection of villages from the UT of Chandigarh citing a government notification of 2018 regarding urbanization of all the villages. PSD team apprised the EG that the state-wise district -wise allocation of number of villages has been done using the rural sampling frame based on the Population Census 2011 data. The villages selected from the UT of Chandigarh would be dropped after receiving confirmation of urbanization of those villages from the concerned field offices during market survey.

3.1.2 EG members raised concerns in the allocated number of villages in some States/UTs as per the proposed sampling design. It was pointed out that the number of allocated villages for certain States (North Eastern States) had increased manifold and had become much higher than the major states which had much higher rural population. It was explained that the discrepancy in State wise allocation of sample villages had occurred due to the criteria of selection of two villages from each district. A number of small States specially in north eastern region had notified a large number of districts resulting in larger number of sample village allocation in these states.

After the detailed deliberation, the EG recommended to try a couple of options to rectify this discrepancy. To begin with, the proposed sample design may be modified using the criteria of allocation of number of sample villages by using the NSS regions in the following manner:

a. Starting with the proposed total number of selected villages (approx. 1400), one village may be selected from each district.
b. In smaller States/UTs with less than three districts, minimum of 5 villages may be allocated at State/UT level.
c. The remaining villages may be distributed based on rural population proportion to NSS regions, thereafter district-wise.

The allocation of sample villages for each State may be examined by the EG for any further improvement.

3.2 Proposed sample design for selection of urban markets for price collection work of Consumer Price Index:

A detailed presentation on sampling design for selection of urban markets for price collection work of Consumer Price Index in the new series was made by the PSD team. Details of the proposed sampling design are given at para 1.3 of Annexure-III.

3.2.1 After detailed discussion, EG noted that the proposed reduction in the number of urban markets from the mega cities was not appropriate owing to the increasing concentration of population in larger cities, heterogenous nature of consumer behaviour and availability of larger number of varied markets with different quality products in bigger cities, especially metropolitan cities. Considering the limited manpower and financial resources and keeping the final urban allocation to be kept at around 1350, the EG suggested to reduce market allocation in towns having population less than 9 lakhs marginally and reallocate the remaining markets to towns having population more than 9 lakh since commodity prices in smaller town may not have as much variation as is the case in larger cities.

3.2.2 EG also advised to allocate more markets to the mega cities (i.e. cities having population more than 75 lakh *viz.* Delhi, Mumbai, Bengaluru). After the detailed deliberation, the EG recommended to slightly modify the criteria for defining the first two categories of towns in the following manner:

Category	Towns having population (Proposed)	Towns having population (Recommended)
(1)	*(2)*	*(3)*
1	More than 1 crore	More than 75 lakh
2	25 lakh to 1 crore	25 lakh to 75 lakh
3	9 lakh to 25 lakh	9 lakh to 25 lakh
4	Remaining State/UT capitals	Remaining State/UT capitals
5	Other towns	Other towns

3.2.3 The EG further suggested to change the number of markets proposed to be selected from category 5 towns spread across four strata in the following manner. The remaining 199 (898-699)

markets may be distributed among the first four categories of towns. EG advised PSD team to present different options of urban market allocation in the next meeting based on which the EG may arrive at a decision after detailed deliberation.

Stratum	Criteria	No. of Markets (Proposed)	Count of towns	Total markets (Proposed)	No. of Markets (Recommended)	Count of towns	Total markets (Recommended)
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Stratum I	Towns with population more than 1 lakh but less than 9 lakh	4	78	312	3	78	234
Stratum II	Towns with population more than 50000 but less than 1 lakh	2	72	144	2	72	144
Stratum III	Towns with population more than 20000 but less than 50000	2	100	200	2	100	200
Stratum IV	Towns with population less than 20000	2	121	242	1	121	121
				898			**699**

3.3 Mapping of items between Consumer Expenditure Survey (CES) 2011-12 and Consumer Expenditure Survey (CES) 2022-23

The Expert group was apprised of the list of items to be considered for the upcoming Market Survey and summary on inclusion of new items and exclusion of obsolete items from the CES schedule in the ongoing 2022-23 survey in comparison to the CPI item basket which was derived from NSS 68th Round CES 2011-12 Schedule.

The EG desired to study the exact mapping of items from the ongoing CES 2022-23 questionnaires with the items covered in NSS 68th Round CES 2011-12 Schedule before the next meeting and accordingly suggested the PSD team to share the mapping of items between two CES schedules.

3.4 Exploring the feasibility of inclusion of collection of prices from e-commerce platforms:

In view of growing online market, EG members were of the view that inclusion of collection of prices from e-commerce platforms may also be explored to be included in CPI. The EG was apprised of the information pertaining to online expenses collected in ongoing CES survey and it

was emphasized that item wise expenditure incurred by households on online purchases will not be available from CES data. In this regard, it was proposed that online price collection from prevailing sources may be explored in FOD offices across 70 bigger towns which are selected purposively in the urban sample, in addition to the allotted markets. The online platform is proposed to be treated as a market of that town. Subsequent analysis of the item wise specifications and prices collected may facilitate the decision regarding consideration of online platforms as viable option of outlets for price collection in the new series of CPI.

During the meeting, representatives from Reserve Bank of India mentioned that the Central Bank had done some research on online mode of price collection. The EG recommended to explore the concurrent international practices for inclusion of online price collection and emphasized the need for the inclusion of ecommerce platforms in the revised series of CPI and requested RBI to share their findings on the online price collection for CPI.

3.5 **Use of mobile based or other IT platforms in data collection of CPI:**

The EG noted that currently price data collection is paper based which leads to delay in data uploading and other data quality issues at some of the places. Therefore, to ensure timeliness and better quality of data, EG suggested that the price data collection work of CPI may be upgraded from paper schedule to CAPI based method by developing suitable mobile based application for the new series of CPI.

3.6 **Revised Base year as 2024=100 for the new series:**

PSD team sought concurrence of the EG on initiating market survey and its related activities. Since price collection for determining the base prices is proposed to be done from January, 2024 to December, 2024, 2024=100 is proposed as base year for the revised series.

The EG agreed to revise base year as 2024=100 and also noted that the completion of base year revision exercise would depend on the timely availability of results of the ongoing CES survey for the years 2022-23 and 2023-24. EG concurred to initiate the market survey and its related activities by PSD.

3.7 **Issues in the existing series:**

To make the revised series more robust and effective, some of the challenges or issues faced in the existing series, as mentioned in para 5 of the Agenda, have been highlighted by the PSD team. The Group was of the view that a threadbare discussion on each of the identified issues would be required to suitably address the concerns. For this, EG suggested PSD team to explore the International practices adopted on these issues and to present them in the upcoming meetings to have a detailed discussion.

4. After detailed deliberations, the following key decisions/recommendations were made:

a. Revised state-wise allocation of villages and urban markets using the suggested criterion mentioned at para 3.1 and 3.2 above may be carried out by PSD team. Results of the exercise would be shared with the EG members at the earliest, in any case before the next meeting.
b. The EG approved the price base of the revised series as 2024=100 and requested to initiate the market survey and its related activities as per para 3.6 above.
c. The EG approved that a communication to NSO, FOD for engaging the required manpower for conducting the market survey for base revision of CPI may be sent. Tentative sample size may be considered as 1550 and 1450 for rural and urban respectively. Once sample design is finalized by EG, the same will be communicated to FOD by PSD.
d. Exact mapping of items from the ongoing CES 2022-23 questionnaires with the items covered in NSS 68th Round CES 2011-12 Schedule should be carried out to understand the changes and suitable adoption of new items in the new series. The PSD team was requested to share the mapping of items between two CES schedules before the next meeting.
e. The EG suggested to explore the current international guidelines and practices adopted by the countries for inclusion of online price collection for compilation of CPI.
f. It was also recommended that the price collection work of CPI should be done using a mobile based application in the new series.

5. The meeting ended with a vote of thanks to the Chair.

******

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former DG(CSO), MoSPI
2. Mr. N. K. Santoshi, ADG, PSD, NSO, MoSPI
3. Ms. Geeta Singh Rathore, ADG, SDRD, MoSPI
4. Mr. Kumar V. Pratap, Sr. EA, DPIIT, Ministry of Commerce and Industry
5. Mr. A. R. Joshi, Principal Adviser, DSIM, RBI
6. Ms. Praggya Das, Adviser, MPD, RBI-Co-opted as a subject expert
7. Dr. Himanshu, Professor, CESP, SSS, JNU
8. Mr. D. K. Sinha, DDG, NAD, NSO, MoSPI
9. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI- Member Secretary
10. Mr. Kunal Kapoor, Deputy Director- Representative Labour Bureau

Other Participants:

1. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
2. Ms. Monami Mitra, Director, PSD, NSO, MoSPI
3. Mr. Rohit Naagar, Deputy Director, PSD, NSO, MoSPI
4. Mr. Divyansh Shukla, Assistant Director, PSD, NSO, MoSPI
5. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI

Government of India
Ministry of Statistics and Programme Implementation
National Statistical Office
Price Statistics Division

Subject: Minutes of the second meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The second meeting of Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairpersonship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 2nd May, 2023 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at the **Annexure-I**.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

i.Updated sample design for rural and urban sectors
ii. Item list for Market Survey
iii. Issues related to Market Survey as observed in the present series
iv. Any other matter with the permission of the Chairperson

The detailed agenda note of the meeting is attached at **Annexure-II**. The proposed updated sampling design for selection of rural and urban markets for price collection work for the new series of Consumer Price Index circulated with agenda is also attached at **Annexure-III**.

3. PSD team apprised the Expert Group about the Action Taken Report on the recommendations made in the first meeting of the Expert Group.Thereafter, an elaborate presentation was made by PSD team regarding the updated sampling design for selection of rural samples and allocation of urban markets for price collection work of the new series of CPI, comparison of the items in the ongoing CES schedule of 2022-23 with 68th round CES schedule 2011-12 and some limitations/issues of existing series that need to be addressed in the revised series.The deliberations during the meeting were as under:

3.1 Proposed updated allocation of villages for new series of CPI

The updated criteria for allocation of villages for new series of CPI as per recommendations of the EG in its first meeting was presented to the Group. Details of the proposed criteria are given at para1.3 of Annexure-III.

3.1.1 PSD team presented two methods of selecting villages for the new series. Both the methods involve two stages of sampling. Stage 1 of the criteria is to allocate sample villages across State/UTs using NSS region wise rural population share. While Stage 2 is to allocated the State/UT wise assigned number of sample villages across districts as per district wise rural population share within NSS region. As approved by the EG in first meeting, stage wise distribution of villages was started with a total of 1400 villages to be surveyed at all India level.

3.1.2 In method 1, selection of one village was first ensured from each district (step 1) followed by ensuring minimum sample size of 5 for UTs and 8 for States (step 2). A total of 711 villages (685 in step 1 and 26 in step 2) were allocated following the aforementioned two steps. In the third and final step, 689 (1400 – 685 – 26) remaining villages were distributed following NSS region wise rural population share. 1399 villages could be allocated at all India level using Stage 1 of method 1. In Stage 2 of method 1, 714 villages (1399-685) were allocated to districts as per district share of rural population within NSS region, since 685 villages were initially allocated district wise.

3.1.3 Method-2 was different from method-1 in implementation of steps 2 and 3 of Stage 1 and procedure of allocation in Stage 2. In step 1, one village was first allocated to each district followed by distributing the remaining 715 villages (1400 – 685) as per NSS region wise rural population share (step 2). Step 3 ensured minimum sample size of 5 for UTs and 8 for States. 1418 villages were allocated at all India level using Stage 1 of method 2. In Stage 2 of method 2, 1418 villages were allocated to districts as per district share of rural population within NSS region with at least one village from each district.

3.1.4 The EG deliberated on the both the methods. It was observed that the total number of sample villages derived following methods 1 and 2 were not differing much.

It was pointed out during the meeting that for certain States/UTs, the newly allocated number of proposed villages are less than that surveyed in the existing CPI series. It was flagged that this reduction in number of proposed villages in those States/UTs might have an impact on the compilation of the respective State/UT CPI in the new series.

3.1.5 After the detailed deliberation, the EG recommended method 2 for allocation of villages with a condition that rural sample size be retained as per the existing CPI series wherever there is a reduction in the allocated number of sample villages using the updated criteria. It was also approved that minimum number of villages to be surveyed from States and UTs may be kept at 8 and 5 respectively. The method of sample selection at district level in Stage 2 was also approved by the EG.

3.2 Proposed options of urban market allocation to different category of towns

As recommended by the EG in its first meeting, PSD team made a detailed presentation comparing the different options proposed for the urban market allocation in towns belonging to first four categories after fixing the number of urban markets allocated to category 5 towns, distributed across Stratum I, II, III and IV as 3 – 2 – 2 – 1 respectively, as recommended by EG in the first meeting. Details of the proposed options are given at para 2.3 of Annexure-III.

3.2.1 Five options for the urban market allocation in different category of towns was presented to the EG. After detailed discussion, it was observed that, out of all the available options, there was a gradual gradation in the number of markets allocated to different category of towns as per the reducing population sizes of the category of towns in Option 4. The State capitals were also allocated an increased number of urban markets which ensures proper representations of the State Capitals in the index compilation considering the population density and heterogeneity of urban markets therein. EG recommended to choose Option 4 for allocating urban markets across different categories of towns.

3.3 Mapping of items between Consumer Expenditure Survey (CES) 2011-12 and Consumer Expenditure Survey (CES) 2022-23

PSD team made a detailed presentation on the mapping of items between the NSS 68th Round Consumer Expenditure Survey(CES) 2011-12, ongoing Consumer Expenditure Survey (CES) 2022-23 and existing basket of CPI, highlighting the inclusion of new items and exclusion of obsolete itemsfrom CES 2011-12 schedule to CES 2022-23 schedule. Team also highlighted that there were multiple cases of clubbing items into a composite item and bifurcation of items into separate itemsfrom CES 2011-12 schedule to CES 2022-23 schedule.The EG was apprised of that the item list for market survey of Base Revision of CPI will include all the items covered in CES 2022-23.

3.4 Issues related to the upcoming Market Survey of the updated series of CPI

PSD team highlighted some of the issues observed in the current CPI series which need to be addressed before launching the Market Survey of the updated series.

3.4.1 The EG deliberated on the issue of the treatment of prices when free or extra items are provided with the original product mentioned in the specification. After detailed deliberations, it was decided to adopt the current approved practice of dealing with such cases.

3.4.2 The EG deliberated on the issue of the treatment of cases where the price of product remains unchanged but quantity changes(applicable only to packaged items). It was discussed that the field investigators may be given an option of entering quantity as well as prices for such items so that the system can automatically calculate the price for original quantity as mentioned in the specification and report the same. PSD team apprised the EG that providing an opportunity to update unit-quantity information every month by data collectors might lead to redefining the fixed item specification and replace the same with most easily available item without paying heed to the already defined item specification which may disrupt the pricing trend. After detailed deliberations, it was decided to devise an option which may facilitate the field investigator for such pro rata conversion of prices in such cases at the time of price

collection without frequently updating the item specifications. EG also suggested regular training of the field investigators, highlighting the need to stick to the detailed item specifications and pricing appropriate items, should be done on a regular basis. Provisioning the option of calculation in mobile application was also suggested by EG.

3.4.3 PSD team further proposed that unit and quantities for items may be fixed before launching market survey and the field investigators may be given a selective list as dropdown menu for most of the items using the existing CPI data base to control diversity in item specification reporting for the upcoming series. The EG deliberated upon the same and suggested that the team may fix the unit and quantities for the items before launching market survey using the existing CPI database to ensure data quality.

3.4.4 The EG had a detailed discussion on the issue of capturing of electricity prices for the upcoming series of CPI. It was proposed to introduce tariff-based reporting of prices, which may be introduced as priced items under the item “electricity” for which consumption weight would be available from CES 2022-23. After detailed deliberations, the EG recommended to consider the total bill paid by the consumers for a specific number of units consumed by the households instead of tariff-based reporting of electricity prices, since tariff rates frequently change along with the consumption slabs. It was suggested that option for introducing three priced items may be exploredfor the item “electricity” mentioning the different number of units of consumption by the households in the selectedmarkets during market survey.

3.4.5 PSD team raised the issue of collection of prices of such items which are subsidized like LPG, electricity etc. Members flagged the issue of house rent imputation for Government owned dwellings in connection to subsidized prices. The EG observed that this is an important issue and detailed deliberations is needed before arriving at any decision regarding pricing of subsidized items. It was recommended that these issues may be discussed in detail in the next meeting. It was also suggested that PSD team may present the excerpts from the available literature and manuals regarding the imputation of house rents done for the Government owned dwellings.

3.4.6 PSD team raised the issue of exploring the possibility of identification of some seasonal non-food/periodic items in the ongoing CES for which price collection may not be required to be done on a monthly basis since the prices of these items are not fluctuating on a monthly basis. EG was also informed that many developed countries including Canada and UK are adopting such approach for the seasonal non-food/periodic items. The EG recommended to discuss this issue in detail in the upcoming meetings.

4.After detailed deliberations, following recommendations were made by the Expert Group:

a. The EG approved Method 2 mentioned at para 1.3 of Annexure III for allocation of rural samples to States/UTs with a condition that existing rural sample size be retained for certain State/UTs wherever there is any reduction observed in the allocated number of sample villages using the approved sampling methodology. It was also decided that minimum number of villages to be surveyed from States and UTs may be kept at 8 and 5 respectively.
b. The EG approved the proposed methodology mentioned at para 1.4 of Annexure III for selection of villages within the district.
c. The EG approved Option 4 mentioned at para 2.3 of Annexure III for the urban market allocation across different categories of towns.
d. The EG recommended to adopt the current approved practice of dealing with treatment of prices when free or extra items are provided with the original product mentioned in the specification.
e. The EG recommended to devise an option which may facilitate that the field investigator for pro rata conversion of prices in cases where either the pack size changes or price of product remains unchanged but quantity changes (applicable only to packaged items), along with frequent training of field investigators on the same. The EG suggested that the instruction guidelines for fixing item specification and price collection should explain various scenarios with proper illustrations.
f. The EG recommended that the units and quantities for the items may be fixed

before launching of Market Survey using the existing CPI data base to control diversity in item specification reporting for the upcoming series and maintain data quality.

g. The EG recommended to consider the total bill paid by the consumers for a specific number of units consumed by the households instead of tariff-based reporting of electricity prices. It was further suggested to explore the possibility of introduction of three priced items under the weighted item "electricity" and consider bills for three most popular units of consumption by the households at the time of market survey.

h. The EG recommended to discuss in detail the house rent index, issue of collection of prices of such items which are subsidized like LPG, house rent for Government owned dwellings, electricity, consideration of zero prices and the issue of exploring the possibility of identification of seasonal non-food/periodic items from the ongoing CES in greater detail in upcoming meetings.

5. The meeting ended with vote of thanks to the Chair.

******

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. N. K. Santoshi, ADG, PSD, NSO, MoSPI
3. Ms. Geeta Singh Rathore, ADG, SDRD, MoSPI
4. Mr. Shyam Singh Negi, DDG, Labour Bureau
5. Mr. A. R. Joshi, Principal Adviser, DSIM, RBI
6. Ms. Praggya Das, Advisor, MPD, RBI-Co-opted as a subject expert
7. Dr. Himanshu, Professor, CESP, SSS, JNU
8. Mr. D. K. Sinha, DDG, NAD, NSO, MoSPI
9. Mr. Rajesh Kumar Sharma, DDG, DPIIT, Ministry of Commerce and Industry
10. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI- Member Secretary

Other Participants:

1. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
2. Ms. Monami Mitra, Director, PSD, NSO, MoSPI
3. Mr. Divyansh Shukla, Assistant Director, PSD, NSO, MoSPI
4. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI

S-11015/4/2022-PSD
Government of India
Ministry of Statistics and Programme Implementation
Central Statistics Office
Price Statistics Division

Khurshid Lal Bhawan, New Delhi
Dated: - 21/09/2023

Subject: Minutes of the third meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The third meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 5th September, 2023 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

i. Action Taken Report of second meeting of the Expert Group
ii. Status of ongoing HCES
iii. Comments received from Field Operations Division on the rural and urban sample verification of new series
iv. Selection of dwellings for House Rent Index
v. Exploring online outlets as price collection alternative in New Series
vi. Development of Market survey module and mobile application for the revised series
vii. Inputs received from Reserve Bank of India on Market Survey
viii. Observations during Zonal Trainings on Market Survey
ix. Any other matter with the permission of the Chairperson

The detailed agenda note of the meeting is attached at **Annexure-II**.

3. At the onset of the meeting, members of the Expert Group expressed their concerns on the availability of results of the first round of Household Consumption Expenditure Survey completed by NSS, MoSPI in July 2023. It was emphasised that, results of ongoing HCES were of utmost importance for the Base Revision exercise since item weights and composition of item basket will be derived based on the mentioned survey. PSD in coordination with Field Operations Division (FOD) has already planned for the extensive exercise of Market Survey, which involves work related to market identification, shop identification and fixing of item specification. A few members of EG expressed their concerns on the utility of the entire exercise, in the absence of HCES data. Considering the importance of the results of HCES for CPI base revision, EG expressed the need to know the current status of data processing of the HCES completed in July 2023. **EG decided that a formal request be made to the concerned officers in NSSO for a brief presentation on the methodology, present status of data processing of first round of HCES and calendar of release of its results in the next meeting**

of EG. The EG requested PSD to go ahead with the market survey according to the timeline as agreed. Decision on base price collection survey may be taken after getting updates from NSSO on CES results.

4. ADG(PSD) briefed the EG about training provided to field officials of the FOD, NSS during the zonal training workshops on market survey. PSD team made a presentation to the EG about the action taken on the recommendations made in its second meeting. Further, a detailed presentation was made by PSD team regarding comments received from FOD, NSSO after verification of sample lists, selection of dwellings for House Rent Index, exploratory exercise for price collection on online outlets in new series, development of market survey module on mobile application, inputs received from RBI on market survey and observations during zonal trainings held for market survey.

The deliberations made during the meeting are as under: -

4.1 Comments received from FOD after verification of sample lists:

4.1.1 Detailed list of comments received from FOD after sample verification was presented before the EG. The observations received from FOD were mainly related to following items:

(a) inaccessibility of rural/urban markets from headquarters,

(b) lack of proper transportation facilities,

(c) cases of rural areas notified as urban,

(d) allotted number of distinct markets not available in a particular town,

(e) number of category wise (Affluent, middle and poor) markets not available in towns as proposed.

For (a), (b) and (c) above, PSD has provided FOD substitution for the selected samples. For the cases at (d) above, the number of markets has been reduced for these towns in consultation with FOD. In case of (e) above regarding non-availability of category-wise (affluent, middle and poor) markets in a town, FOD officials were requested to revisit the sample villages/blocks for identification of affluent, middle and poor category markets as the method of categorization of markets was not followed while verification exercise was conducted. EG agreed to the process adopted by PSD of referring such cases to FOD for further scrutiny and confirmation of category wise availability of markets.

4.1.2 On the question of non-availability of adequate number of markets in a town/ village, EG advised that in such cases the substitution of town/ village would not serve any purpose since the substituted town would also be from the same stratum and hence will have similar characteristics and therefore, the reduction in number of markets for such villages/ towns would be most appropriate. A decision in this regard should be taken in consultation with concerned RO.

4.2 House Rent Index:

4.2.1 PSD team presented the proposed sampling design for the selection of dwellings for compilation of House Rent Index for the new series. It was proposed that listing of dwellings and collection of rent data would be done for rural areas also during the Market Survey exercise. However, inclusion of rent data in rural basket will depend on the rural rental

expenditure and availability of rented dwellings in rural sector. EG noted that in the Northern states like UP, Bihar etc, it was rare to find a rented dwelling in rural areas. PSD team mentioned that, only 6 dwellings from a village have been considered for Market Survey. EG agreed to the proposal to conduct survey in rural areas. EG also agreed for identification of 12 rented dwellings in urban sector as has been the practice in the current series.

4.2.2 On the basis of suggestions received from FOD officials and various interactions with RBI team, PSD team proposed that only private rented dwellings may be considered for House Rent Index in the new series. It was further explained that the rent for an accommodation provided by Government/ employer depended on pay level of the occupant and his/her position in hierarchy and therefore were not based on prevailing "market rent". Therefore, the government and employer provided houses may not be included for selection of dwellings for collection of house rent for computation of house rent index. EG agreed with the proposal.

4.2.3 EG agreed with the proposal of PSD team that the selection of private rented dwellings should be based on the number of living rooms, as followed in the present series. It was further informed that the share of private rented dwellings for different categories could be derived from the Survey on Drinking Water and Housing conditions conducted by NSS during July to December, 2018. EG suggested that, share of private dwellings may be calculated from recently available data of NSS Multi Indicator Survey conducted during 2020-21.

4.3 Exploring addition of online outlets for price collection in New Series

4.3.1 The Expert Group in its first meeting suggested to explore possibility of price collection from online platforms in the new series since a lot of population has been using these platforms for buying various grocery and other products. PSD team informed the EG about the efforts made so far. It was also informed that, the ongoing HCES did not capture the item-wise weights of online purchases and therefore suggested that a couple of online platforms popular in a town may be treated as a separate market outlet and prices available from these outlets in addition to brick and mortar markets may be used for index compilation in the new series. The process proposed for capturing price data from online platform may be seen at points 4.1.1 – 4.1.3 of Annexure-II.

4.3.2 Detailed deliberations took place on the issue of online price collection, specification of items, online platforms to be included, frequency of data collection etc. EG recommended the following for exploring collection of online prices:

4.3.2.1 To start with, Amazon/Flipkart and Bigbasket/Blinkit may be considered for exploring the online price behaviour and trend of mostly packaged items viz. clothing, footwear, durable goods, electronic items, branded food and beverages etc.

4.3.2.2 Twelve (12) towns with more than 25 lakh urban population as per Census 2011 may be considered for this exercise. Concerned Regional Offices of FOD may be issued necessary guidelines for price collection.

4.3.2.3 Item specifications to be captured from online platforms will be decided based on the two topmost item specifications reported in the markets covered in each of these 12 towns, based on specification used in brick & mortar shops. Item baskets will be pre-defined and shared with FOD before commencing base price collection exercise.

4.3.2.4 To capture the fluctuation in prices effectively, it was suggested to collect prices from online platforms fortnightly on a previously decided fixed date.

4.4 Development of Market survey module and mobile application for the revised series

4.4.1 PSD team apprised the EG the status of development of portal for Market Survey and creation of mobile application for collection of prices for the new series including base year prices. EG suggested to expedite the process given the fixed timelines for launching of mobile application and its comprehensive check required by both FOD and PSD. EG was also informed that the mobile application development may require some time as the agency for development, design, hosting and maintenance of the mobile application will be selected through RFP process as per GFR and also would require necessary approvals.

4.5 Inputs of RBI for market survey

PSD team presented the suggestions of RBI for market survey which were received through mail. The suggestions given by RBI were discussed and comments of PSD were also presented in the meeting. The details of suggestions of RBI and comments of PSD thereon may be seen at point 6 of Annexure-II. In most of the cases, comments of PSD were agreed to by the EG members. The recommendation made by the Expert Group on the suggestions of RBI are presented below.

4.5.1 The shop for collecting the prices of online media service provider would be online and that would need to be identified. Concerned ROs/ SROs may decide the name of media service provider/ OTT platform on the basis of popularity in the area and the subscription price of that platform may be taken.

4.5.2 The issue of prefixing SPD for a variety for each summer month of mangoes in a state was considered since different varieties of mangoes appear in different markets in different months. After detailed deliberation, it was felt that such variability may be present for almost all the fruits and vegetables covered in CPI basket. It was mentioned that since there were multiple varieties of fruits and vegetables available in the markets during the entire year, pre-fixing the same would not be suitable. Further, the availability of a particular variety of any item in a particular month depends upon factors like monsoon, harvest of the variety etc. and may vary between years. In the light of the discussion, EG recommended that variety of mangoes should not be fixed. Rather, the most popular variety of mango as available in respective market should be priced in each summer month. The same practice is to be followed in case of all the fruits and vegetables.

4.5.3 There was a suggestion to collect gold/ silver jewellery making charges as a separate item. Also, the specification for making charges should be pre-defined in the SPD. PSD team mentioned that fixing specification for making charges might not be possible considering the amount of variability involved in different types of jewellery items which also depends on the shop, design of the jewellery etc. PSD team therefore proposed to include prices of gold and silver exclusive of making charges. The Gold/silver prices excluding making charges will also capture the actual price movement of the jewellery as the making charges are mostly a fixed percentage of gold/silver value in a jewellery item. Collection of silver and gold prices from the markets would ensure collection of correct, reliable and comparable prices from the markets selected for the purpose.

4.5.4 For measuring airfare, RBI suggested that market survey should provide such SPDs which cover all regularly scheduled domestic and international commercial airline trips on certified carriers departing from each major city/ town. PSD team clarified that only domestic air fare should be considered since proportion of foreign travel of the total air travel expenditure may be too small on an average. For fixing the item specifications across markets, top three routes from 116 cities with airports could be used as DG of Civil Aviation has already provided the required information. **EG decided that concerned State/UT capital ROs would provide the air fare for the top three routes as informed by DGCA of all the airports of that State/UT. Airfare will be collected for the journey in the month when the air ticket is purchased at least 15 days prior to the date of journey.**

4.6 Observations during Zonal training held for Market Survey

4.6.1 The observations of PSD and discussions held during the six zonal trainings were presented to the EG. Details regarding the issues are available against **point 7 of Annexure II**. It was mentioned that in its second meeting, EG recommended that the units and quantities for the items may be fixed before launching Markey Survey to ensure lesser discrepancy in reported prices. However, field offices requested for fixing just the unit and not quantity, because in some cases, the specified quantity might not be available/consumed in a particular market. EG agreed to the suggestion of field offices.

5. The summary of the recommendations of EG in this meeting is presented below:-

a. A formal communication may be sent to the concerned officers in NSSO for a brief presentation on the methodology, present status of data processing of first round of HCES and calendar of release of its results in the next meeting of EG. The EG also advised PSD to go ahead on market survey as per current timelines. Decision on base price collection survey may be taken after getting updates from NSSO on CES results.

b. Do not substitute towns as the substituted town would be of the same stratum as the original one and hence, would have the same characteristics. However, the reduction in number of markets may be accepted, if considered appropriate. Finalize the towns and villages in consultation with concerned RO, if required.

c. Government accommodations and all other employer provided accommodations may not be considered for collection of house rent for construction of House Rent Index. Rent may be collected only from the dwellings rented by private persons (exclude those dwellings provided by the government/employer). Share of private rented dwellings may be calculated from recently available data of NSS Multi Indicator Survey conducted during 2020-21.

d. Price collection from on-line markets:

- To start with, Amazon/Flipkart and Bigbasket/Blinkit may be considered for exploring the online price behaviour and trend of mostly packaged items viz. clothing, footwear, durable goods, electronic items, branded food and beverages etc.
- Prices may be collected from 12 towns with more than 25 lakh urban population as per Census 2011 for this exercise. Concerned Regional Offices of FOD may be issued necessary guidelines for price collection.

- Item specifications to be captured from online platforms to be decided based on the two topmost item specifications reported in the markets covered for each item in each of the 12 towns, based on specification used for brick & mortar shops. Item baskets will be pre-defined and shared with FOD before commencing base year price collection exercise.
- Prices may be collected from online platforms fortnightly on a previously fixed date.

e. Requested expeditious action for the mobile application development.

f. Prices of online media service providers may be collected by the concerned ROs/ SROs after ascertaining popularity of a media service provider.

g. Month wise prices of popular variety of fruits and vegetables should be collected. There was no need to specify a variety for a month in SPD.

h. Prices of Silver and Gold should be collected in each city without inclusion of any making charges. Making charges also can not be made a separate item due to practical difficulty.

i. Airfare information should be collected by State/UT capital ROs for the top three routes of all the cities in their jurisdiction where airports are operational. Top three most popular routes provided by DGCA from each airport may be used. These airfares would be fares prevailing 15 days prior to the date of journey.

6. The Member secretary of the EG raised the concern about leakage of the information related to CPI or Base revision in public in recent past. This was noted with concern by the EG. EG decided that a written undertaking may be taken from each participant of the meeting, both official and non-official, before the commencement of the meeting that he/ she would not divulge any details of the discussion in public directly or indirectly. This may be enforced from the next meeting of the Committee.

7. The meeting ended with the vote of thanks to the Chair.

******

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. N. K. Santoshi, ADG, PSD, NSO, MoSPI
3. Mr. A. R. Joshi, Principal Adviser, DSIM, RBI
4. Mr. D. K. Sinha, DDG, NAD, NSO, MoSPI
5. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI- Member Secretary
6. Dr. Himanshu, Professor, CESP, SSS, JNU
7. Ms. Kamini Tandekar, JD, DPIIT, Ministry of Commerce and Industry
8. Mr. Kunal Kapoor, DD, Labour Bureau
9. Mr. Dulal Biswas, AD, DPIIT, Ministry of Commerce and Industry

Other Participants:

10. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
11. Ms. Monami Mitra, Director, PSD, NSO, MoSPI
12. Mr. Rohit Nagar, Deputy Director, PSD, NSO, MoSPI
13. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
14. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
15. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI

S-11015/4/2022-PSD
Government of India
Ministry of Statistics and Programme Implementation
Central Statistics Office
(Price Statistics Division)

Khurshid Lal Bhawan, New Delhi
Dated: 06.11.2023

Subject: Minutes of the fourth meeting of Expert Group (EG) for Base Revision of Consumer Price Index.

The fourth meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex- Director General (CSO) on 30th October, 2023 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I.** As directed by the EG in its last meeting, an undertaking for ensuring confidentiality of the discussions/deliberations held in the meeting, was taken from all attendees of the meeting.

2. At the outset, the Chairman welcomed the participants and expressed his satisfaction for inviting ADG(SCD) and his team for discussing the updates on the Household Consumption Expenditure Survey. Thereafter, ADG(PSD) briefed the EG members about the following agenda points to be discussed in the meeting:

I. Action Taken Report of third meeting of the Expert Group.
II. Progress update and status of HCES results.
III. Final sample list for rural and urban sectors for Market Survey.
IV. Fixing varieties for fruits and vegetables

The detailed agenda note of the meeting is attached at **Annexure-II.**

3. The PSD team apprised the Expert Group about the Action Taken Report on the recommendations made in the third meeting of the Expert Group. Thereafter, detailed discussions were carried out on the proposed agenda points. The deliberations held during the meeting were as under:

3.1 Progress update and status of HCES results.

In the last meeting of the EG held on 05.09.2023, the members of the Expert Group expressed their concerns on the availability of results of the first round of Household Consumption Expenditure Survey (HCES) completed by NSS, MoSPI in July 2023. It was emphasized that, results of ongoing HCES were of utmost importance for the Base Revision exercise since item weights and composition of item basket will be derived on the basis of the results of the HCES. The market survey for base revision of CPI is going on and base price collection is tentatively planned to be started from January, 2024 for the period of one year. Some of the members of EG expressed their concerns on the utility of this entire exercise, in the absence of HCES data. Considering the importance of the results of HCES for CPI base revision, EG expressed the need to know the current status of data processing and calendar of release of the results of HCES. The following updates were provided by ADG(SCD) regarding HCES:

3.11 As per the recommendation of the National Statistical Commission (NSC), MoSPI is conducting two back-to-back Household Consumption Expenditure Surveys, each of one year duration.

3.12 A Working Group (WG) was constituted, under the Chairmanship of Shri Pronab Sen, Ex-Chief Statistician of India, Former Program Director, India Team Researcher, International Growth Centre, with a view to implement the recommendations of NSC. Changes in the survey instruments as well as methodology of collection of data were done under the overall guidance of the WG.

3.13 Accordingly, the first of the two back-to-back HCES was launched in August, 2022. The second round commenced in August, 2023 and the field work is expected to be completed by August, 2024.

3.14 To improve the quality of data, many validation checks have been in-built in the CAPI software. All efforts are also being made by the field offices by way of regular trainings, inspections and continuous monitoring of the data being collected to ensure data quality.

3.15 As per the current plan of action, the data processing, data compilation and preparation of reports may take around 4-6 months' time after completion of the data

collection work. Therefore, the results of HCES may be published in the last quarter of the FY 2024 - 25 i.e. January-March, 2025.

3.16 The final decision on dissemination of results will be taken by the competent authority at that time.

In view of the above, the **EG members unanimously agreed to conduct the base price collection exercise for base revision of CPI from January, 2024 to December, 2024**. In this case, the base year for the revised series will be 2024=100. EG also requested to ADG(FOD) to direct the concerned officials for expediting the hiring and deployment of additional manpower for the base price collection exercise. Since market survey and base price collection is done only once at the time of revision of the series, therefore, utmost care and importance should be given by the FOD team to conduct this exercise. ADG(PSD) also requested the SCD and FOD team to ensure better monitoring of price data by RO heads and by FOD (HQ) in view of the significance and importance of CPI/Inflation data in decision making for the economic policies of the country.

3.2 **Final sample list for rural and urban sectors for Market Survey**

3.2.1 Urban Sample Size

PSD apprised the committee about the final sample list for both Urban and Rural sectors after the verification done by the FOD team. Initially, 1432 urban quotations were allocated for the new series to different states/ UTs for base revision of CPI. However, after the town wise sample list was shared with field offices, the following cases were reported by the field offices:

1. Category-wise number of quotations allotted was not available in the selected town.
2. Number of distinct allotted markets was not available in the selected town and in some cases, there was an overlap.
3. In a few cases, selected town didn't have any market within its boundary.

The EG was also informed that the urban sample list was finalized after incorporating the suggestions/comments received from the field offices. Now 33 markets have been reduced from the initial allocation of 1432 markets and 6 towns have been reduced from the initial allocation of 441 towns. PSD also informed the committee that since sufficient number of markets were not available in some towns of Kerala and Lakshadweep, PSD increased 2 towns in Kerala and 4 town in Lakshadweep in order to maintain the number of markets on request from these state/UT. **Final number of urban towns is now 435 and urban markets is 1399 for the revised series of CPI.**

3.2.2 Rural Sample Size

Initially, 1471 villages were allocated for the new series of CPI. However, total 6 villages have been reduced from 1471 villages due to non-availability of villages for price collection work. The following reasons have been informed by the FOD team for reduction of rural samples;

1. All the villages in the East District of State Delhi is urbanized.
2. In Lakshadweep only 4 villages are available, remaining villages are uninhabited.
3. Distinct markets in Daman & Diu and Dadra & Nagar Haveli are not available, hence 4 villages have been reduced from initial allocation of 10.

T**he final number of villages for CPI revised series is 1465.**

3.2.3 EG noted the reasons for change in the sample size and agreed for the final sample list for both Urban and Rural sectors for market survey as proposed by the PSD.

3.3 **Fixing varieties for fruits and vegetables.**

PSD informed the committee that during the third meeting of the Expert Group, it was decided to collect month wise prices of popular variety of fruits and vegetables available/popular during the month instead of fixing a variety. In view of the PSD team, the following issues may occur if this decision will be implemented;

a. Month over month inflation for the items may not be deciphered, since the variety for which prices collected for two consecutive months may not be same.
b. Year on year inflation for the items may also be affected, since the variety for which the price collected for the current month and the last year may not be same.
c. Due to the above-mentioned reasons the concerned sub-group, Group and General inflation may also be get affected.
d. It will be very difficult to carry out the scrutiny and validation of prices reported against these items.
e. Since item specifications are not fixed and identifying variety for each month is purely observation based, it can give scope to bias the numbers by reporting the lowest priced variety or highest priced variety.
f. This decision is in deviation of the international practices which suggest to fix specification for each item.

In view of this, the PSD team requested EG to review its earlier decision. After detailed, deliberations, **EG decided that item specification must be captured for all the items including fruits and vegetables as per practice in the existing series.**

PSD also proposed to add a few (preferably two) varieties to be captured from each market for Apple, Mango, Grapes and Orange. **EG agreed to the proposal of PSD to collect prices for different varieties and suggested PSD to collect three varieties of mango from each market since many varieties of mango were available in the markets. EG further recommended to collect prices for two varieties of Apple, Grapes, Oranges and Banana from every market.**

4. The summary of recommendations of EG are as follows:
    1. Base price collection should be started from the Month of January 2024 onwards and to be completed in the calendar year 2024 so that the base year for the new series shall be 2024=100.
    2. The final sample size for the revised series for Urban is 1399 markets from 435 towns and 1465 villages for the Rural sector.
    3. Specifications must be captured for all the items including fruits and vegetables as per practice in the existing series.
    4. Three varieties of Mango should be collected from all the markets and for Apple, Grapes, Oranges and Banana prices of two varieties need to be collected.

    The meeting ended with the vote of thanks to the Chair.

*****

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. N. K. Santoshi, ADG, PSD, NSO, MoSPI
3. Mr. A. R. Joshi, Principal Adviser, DSIM, RBI
4. Mr. S.S. Negi, DDG, Labour Bureau
5. Dr. Praggya Das, Adviser, MPD, RBI
6. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI- Member Secretary
7. Ms. Kamini Tandekar, JD, DPIIT, Ministry of Commerce and Industry

Special Invitee:

1. Mr. S.C. Malik, ADG, SCD/FOD, MoSPI
2. Ms. Kanchana V. Ghosh, DDG, FOD HQ, MoSPI
3. Mr. M S Subramanya Rao, DDG, SCD, MoSPI 7

Other Participants:

1. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
2. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
3. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
4. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
5. Ms. Smita Rawat, Sr. Statistical Officer, PSD, NSO, MoSPI
6. Mr. Deepak Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
7. Mr. Ajay , Jr. Statistical Officer, PSD, NSO, MoSPI
8. Ms. Jyoti, Jr. Statistical Officer, PSD, NSO, MoSPI
9. Ms. Priya, Jr. Statistical Officer, PSD, NSO, MoSPI 8

S-11015/4/2022-PSD
Government of India
Ministry of Statistics and Programme Implementation
Central Statistics Office
Price Statistics Division
Khurshid Lal Bhawan, New Delhi

Dated: - 16/04/2024

Subject: Minutes of the fifth meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The fifth meeting of the Expert Group for Base Revision of Consumer Price Index CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director General (CSO) on 4th April, 2024 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**.

2. At the outset, the Chairperson welcomed the participants and briefed about the agenda points attached at **Annexure-II**.

3. ADG (PSD) informed the members of EG that base price collection has commenced from January 2024 and online training has been imparted to all the six zones of FOD in February 2024 by PSD. Thereafter, PSD team gave a presentation about the action taken on the recommendations made in its fourth meeting and agenda points for consideration during the fifth meeting of the EG.

The deliberations made during the meeting and recommendation made are as under:

4.1 **Action Taken Report on the decisions taken during fourth EG meeting:**

4.1.1 EG was briefed about the action taken on the decisions taken during fourth EG meeting. It was also informed that some modifications have been done in sample list (post fourth meeting of EG) to incorporate suggestions of FOD. The final sample size is 1395 markets from 435 towns for urban sector and 1465 villages for the rural sector. **EG agreed with the modifications**.

4.2 **Release of HCES 2022-23 factsheet**:

4.2.1 PSD team informed that factsheet of the HCES 2022-23 has been released by MoSPI. However, no modification can be done in the item basket for base revision based on the factsheet, as State and item wise average expenditure share and number of households reporting is needed for that purpose. It was informed that PSD team has requested SCD for the unit level data, to which ADG SDRD informed that work for finalisation of unit level data is in progress. **EG suggested to send a request to NSSO again for sharing the State, sector and item wise**

household budget share and number (including percentage) of households reporting consumption of an item.

4.3 **Issues related to PDS Items**:

4.3.1 EG members were informed that for the base revision, households would be distributed across the following PDS categories based on the HCES 2022-23 data i.e. Antodaya Anya Yojana (AAY), Below Poverty Line (BPL), Above Poverty Line (APL), Priority Households (PHH), State Food Security Scheme (SFSS) and Others. Accordingly, prices for the categories are to be collected for Base Revision purpose. However, as per National Food Security Portal, presently only two categories namely, AAY and PHH exist across the States under NFSA.

4.3.2 Further, RO Thiruvananthapuram indicated that other than AAY and PHH, other categories namely- NPS (Non-Priority Subsidy), NPNS (Non Priority Non Subsidy) & NPI (Non Priority Institutions) were also available in Kerala. It was informed that in the absence of the exact categories as mentioned in price collection schedule, field offices were facing difficulty while collecting data for PDS in market survey portal.

4.3.3 **PSD proposed that, field offices of NSSO may be requested to follow the criteria adopted for collection of data during HCES 2022-23 in the price survey as well. EG agreed with the proposal of PSD.**

4.3.4 Further, EG members were informed that items covered under PDS as per HCES questionnaire viz. rice, wheat, atta, coarse grains, salt, sugar, pulses, edible oil, kerosene, have been included for base price collection also. Each of these items are canvassed separately for free and chargeable distribution for five categories (as per HCES list). During the trainings organized at FOD zonal level, it has been brought to the notice of PSD that in some of the States, different varieties of pulses and oil are being distributed in different months under PDS. Presently, in line with the extant practice, price collection has been planned for a single most popular variety for each of the listed items.

4.3.5 EG members mentioned that if different varieties of edible oils and pulses have different prices, it would not be pertinent to collect prices for one particular variety. EG also highlighted that the criteria of "most popular variety" should not be adopted in case of PDS as in ration shops consumers do not have any option for choosing a variety as per their choice. The distribution is done as per availability of stock of a particular variety.

4.3.6 **EG suggested that for base price collection, price of wheat, rice, other coarse grains, sugar, kerosene and salt should be collected for all the PDS shops. For the remaining PDS items viz. edible oil, spices and pulses, prices for all the available varieties may be collected every month.**

4.4 **Issues related to Airfare**

4.4.1 During the third meeting of Expert Group it was decided that State/UT capital ROs would collect data related to 'airfare' for the top three routes of all the cities in their jurisdiction where airports were operational for top three most popular routes identified by DGCA for each such airport.

4.4.2 EG was informed that in the list given by DGCA, there was no route for the State of Haryana as there was no functional airport in Haryana. In this case, "Airfare index" for Haryana would not be compiled. **EG suggested that for Haryana, if significant weight for air travel in the consumption basket of households in Haryana was received, airfare for the most popular routes captured in Delhi may be used for compiling airfare index, as most of the air travellers from Haryana would be using Delhi airport for their air travel. In other such cases also, airfare of routes of nearby most popular airport may be used at the time of index compilation.**

4.4.3 EG members were further informed that according to earlier decision, airfare for maximum of three most popular routes from an airport was to be collected but there were a few States/UTs, where there were only two direct flights (Sikkim and Puducherry) and thus the information would be collected for only these two routes. This may further go down in case some of these flights become non-operational in a particular month. These two factors i.e. lesser number of flights and possibility of non-operation of flights may result into lesser number of observations and hence may further result in high volatility of the airfare index for these States/ UTs. Further, there were certain airports from which large number of flights were under operation but there was only one airport in operation in that State/ UT (Telangana and Delhi) resulting in collection of information on only three routes and thus resulting in high volatility of airfare index for these states/ UTs.

4.4.4 **On the issue of fewer number of airports in some State/UTs and considering lack of representativeness, EG suggested that for cities with million plus population, airfare for 5 most popular routes may be collected. The choice of routes may be made in consultation with DGCA.**

4.4.5 EG was informed that the airfare is collected for one-way adult cheapest economy non-stop flight with 15-day advance booking. It was further informed that this method results in collection of airfare information only first half of the month for the travel in second half. **To resolve this issue, EG suggested to update the data collection methodology with 7-day advance booking and all the routes may be allocated equally among the first three weeks of a month so that the date of booking and date of travel fall in the same month.**

4.4.6 PSD team informed that base prices have already been collected for January to April, 2024, following the earlier methodology and the airfare with the newly suggested methodology would be collected for the remaining months

commencing May 2024. Therefore, the average airfare of eight months would be used for compilation of the base price.

4.5 **Issues related to items belonging to 'Health' and 'Education' sub-group**

4.5.1 For items under Health subgroup, most popular doctor, hospital, medicine shops and stores are to be identified and for education subgroup, most popular school and bookshops are to be identified as per the guidelines issued for Market Survey and subsequent Base Price collection exercise.

4.5.2 Guidance of EG was sought to deal with the cases where Government hospitals and Government Schools/Colleges were the most popular and doctor consultation and medical services were provided free of cost and in Government schools and colleges, no tuition fee was charged and books were mostly distributed free of cost. Presently, FOD has been requested to prioritize finding a private hospital/school following popularity criterion and if not available, record zero price along with appropriate remarks. For markets where only Government Hospitals or Schools/ Colleges were providing the services without charging any fee, and private institutions were not available, zero prices would be reported. **EG agreed to the guidelines provided**.

4.5.3 EG was apprised that in some State/UTs like Rajasthan and Bihar, books for some subjects were combined for each quarter and field offices were finding it difficult to fix the item specifications in such cases. **EG suggested that another priced item as "combined books" may be added along with the existing priced items to resolve this issue.**

4.6 **Issues related to item specific data collection.**

4.6.1 **Legal Expenses**- EG was apprised that field offices are finding difficulty in pricing this item as consultation charges of lawyers vary on case-to-case basis. EG looked at the schedule of HCES 2022-23 and found that the services covered under "legal expenses" included items like lawyer's fees, legal and court fees, payments made for affidavit etc. The Charges of Lawyers' may vary a lot even in the same market and it may be very difficult for the data collector to collect the charges for that every month. However, decision on dropping the item at this stage may be too early as weights for the item of consumption were not known. After a detailed discussion on the subject, **EG suggested that the charges for filing first application in a civil suit may be fixed for pricing this item.**

4.6.3 **Electricity**- EG was apprised that for electricity, total amount payable by a consumer (total unit tariff plus meter charge and fixed charge, if any) for first 100 units, 200 units and 300 units were being captured from market specific DISCOM. Subsidy for a particular slab is included while calculating the price paid

for fixed number of units of electricity consumption. **EG agreed with the practice adopted.**

4.6.4 **Cinema Theatre**- EG was informed that for this item, ticket price of the most popular movie of a particular week is being collected by fixing a particular day and a particular time slot in that week. **EG agreed to the practice followed.**

4.6.5 **Services like Domestic help, cook, attendant, babysitter, driver, cleaner, sweeper-**

The issue of field officers facing difficulty in identifying the source of data collection for these items was also raised seeking guidance of EG. Whether the source of data of these services should be households or Hiring agencies or individual working engaged in these occupations in the selected markets was discussed threadbare. **EG suggested that preferred source of price data for these items should be "hiring agency" available in the selected village/ urban area in the vicinity.**

4.7 **Update on House Rent Module**

4.7.1 EG members were informed that as per the factsheet of HCES 2022-23, percentage share of rent in MPCE in rural sector is 0.78% only. While for urban, it is 6.56%. In view of lower share of rent data in rural areas as per factsheet, PSD proposed to exclude rural sector for rent data collection. It was also informed to EG that as on 04.04.2024, out of 3661 mapped dwellings in rural sector, rent for 1421 dwellings have been reported to be not available by the concerned field offices.

4.7.2 **EG felt that the response received so far was good enough to go ahead with the collection of base prices for rural rented dwellings. However, the issue may be re-examined after receiving complete (imputed value of rent and rent) housing expenditure share from NSSO.**

4.8 **Issues related to collection of base prices**

4.8.1 During Market Survey, it is proposed that priority must be given to the item specifications fixed and prices for the same may be collected from reserve shops or open market, as per availability, in the event of non-availability of fixed item in the mapped original shop. If during the months of base year price collection, the item specified in a market suddenly becomes unavailable, then it may be substituted with a suitable replacement and prices for the new specification may be collected from January 2024 onwards. Final Base Price for any item will be average of prices reported for latest specification during 2024.

4.8.3 The non-availability of an item may be decided based on both the situations i.e. temporarily un-available as well as permanently unavailability of products in the markets. **EG agreed to the guideline.**

4.9 **Collection of Electricity Rates**

4.9.1 The item electricity constitutes three priced items namely, "electricity (first 100 units)", "electricity (first 200 units)" and "electricity (first 300 units)". Cases of non-reporting has been observed for some of the three items in the submitted data. Due to inconsistency in reporting across the markets, it is proposed to collect electricity prices at State/UT level (through State capital ROs), from all the DISCOMs operational in that particular State/UT instead of collecting from each market since the rates charged by DISCOMs were uniform in the area of its operation within the State / UT. **EG agreed to the suggestion.**

4.10 **Other items**

4.10.1 In the CES schedule, there were items listed as "other items", the purpose of which is to include all such items which were not specifically mentioned as individual items for the purpose of data collection in the corresponding Section or Subgroup. While defining the schedule for Market Survey of Base revision of CPI, items indicated as 'other items' were kept for defining the item basket. PSD proposed to review whether to include all such items for collection of Base Prices, in absence of State/UT and sector wise weights to improve the data quality of CPI frame and reduce the time of data validation. **EG suggested that decision on the same may be taken after studying the State and sector wise expenditure share of 'other items' from HCES data.**

5. **The summary of the recommendations of EG in the meeting is presented below:-**

a. State, sector and item wise household budget share and proportion of household consuming the item may be requested from NSSO to decide on the items which may be excluded from revised base of the series.

b. Field offices may be requested to follow the criteria adopted during HCES 2022-23 while collecting prices of PDS items.

c. Information on price of wheat, rice, other coarse grains, sugar, kerosene and salt, from all the PDS shops may be collected. For the remaining PDS items viz. edible oil, spices and pulses, prices for all the available varieties may be collected every month.

d. For Haryana, in absence of any functional airport, if weights are received for air travel in the consumption basket of households from the state, prices for popular routes captured in Delhi may be used for compiling airfare index of Haryana, as facilities of Delhi airport is most likely used by the people residing in Haryana. In other such cases also, prices corresponding to routes of nearby most popular airports may be used at the time of index compilation.

e. On the issue of fewer number of routes in some State/UTs and lack of representativeness, EG suggested that for cities with million plus population, airfares for the 5 most popular routes may be collected. Routes may be decided in consultation with DGCA.

f. EG suggested to update the data collection methodology with 7-day advance booking and all the routes may be allocated equally among the first three weeks of a month so that the date of airfare collection and date of travel fall in the same month.

g. For markets where only Government Hospitals or Schools/ Colleges which do not charge any fee were available, and private institutions were not available, zero prices may be reported for such services.

h. A new priced item "combined books" may be added along with the existing priced items to take care of cases where such books were being supplied.

i. For 'Legal expenses', the charges for filing first application of a civil case may be fixed for pricing this item.

j. The preferred source of price data for personal services should be "hiring agency" available in the market vicinity.

k. The collection of base prices for rural rented dwellings should be continued wherever such prices were being reported.
The issue regarding adequacy of observations and representativeness may be re-examined after receiving complete (imputed plus rent) housing expenditure share in household consumption basket from NSSO.

l. EG agreed to the proposal of PSD for giving priority to the item specifications fixed. The prices may be collected from the reserve shop if such item was available in the shop, otherwise, the price of the same item may be collected from open market, as per availability.

m. If during the months of Base Price collection, the item specified in a market suddenly becomes unavailable, it may be substituted with a suitable replacement and prices for the new item may be collected from January 2024 onwards. Final base price for any item will be average of prices reported for same specification during 2024.

n. Electricity prices may be collected by the State/UT capital ROs separately for rural and urban sectors, from all the DISCOMs present in that State/UTs instead of collecting from each market.

6. The Chairman emphasised that the proper monitoring and review of price data was

required at all levels i.e. PSD, HQ, Zonal and Regional offices of NSSO (FOD) during entire the base revision exercise. The Chairman further suggested that given the importance of base revision exercise and to ensure collection of high-quality data, regular and frequent interactions should take place between field offices of FOD and PSD.

7. The meeting ended with the Vote of Thanks to the Chair.

******

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. N. K. Santoshi, ADG, PSD, NSO, MoSPI
3. Mr. Siddhartha Kundu, ADG, SDRD, NSSO, MoSPI
4. Mr. A. R. Joshi, Principal Adviser, DSIM, RBI
5. Dr. Himanshu, Professor, CESP, SSS, JNU
6. Mr. D. K. Sinha, DDG, NAD, NSO, MoSPI
7. Mr. Rajesh Kumar Sharma, DDG, DPIIT, Ministry of Commerce and Industry
8. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI- Member Secretary

Other Participants:

1. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
2. Ms. Monami Mitra, Director, PSD, NSO, MoSPI
3. Mr. Rohit Nagar, Deputy Director, PSD, NSO, MoSPI
4. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
5. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
6. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI

S-11015/4/2022-PSD
Government of India
Ministry of Statistics and Programme Implementation
Central Statistics Office
Price Statistics Division

Khurshid Lal Bhawan, New Delhi
Dated:- 04/09/2024

Subject: Minutes of the sixth meeting of the Expert Group (EG) for Base Revision of Consumer Price Index

The sixth meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 9th August, 2024 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

- Action taken report on the decisions taken during fifth EG meeting
- Dissemination of State level Item Indices
- Treatment of PSD offtake at zero prices
- Treatment of missing prices
- Weighted average of consumption brackets in index of electricity
- Core Inflation
- Preparation of Weighing Diagram for the upcoming series of CPI

The detailed agenda note of the meeting is attached at **Annexure-II**.

3. DDG (PSD) briefed the members of the EG on the current status of the CPI base revision work. Following this, DDG (PSD) delivered a presentation to the EG on the actions taken in response to the recommendations made during its fifth meeting. Additionally, the PSD team provided a detailed presentation on the agenda points mentioned above.

The deliberations made during the meeting are as under: -

4. Action Taken Report on the decisions taken during fifth EG meeting:

4.1.1 EG was briefed about the action taken on the decisions taken during fifth EG meeting.

4.1.2 In the fifth meeting of the Expert Group, it was recommended that for cities with a population exceeding one million, airfares for the five most popular routes should be collected in consultation with DGCA. EG members were informed that a letter was sent to DGCA requesting information on the five most popular routes for 11 cities with a population of over one million, according to the 2011 census. DGCA has shared the data for these routes in the last week of July, after which these additional routes were incorporated into the Airfare module of the Urban Portal and Field Offices have been intimated about the same.

4.1.3 EG members expressed that price data for the additional routes would be available for the remaining five months of Base Year 2024 and therefore would not fully capture the seasonality of airfares for these routes. **EG suggested that price details for these routes for previous months (January to July) may be obtained from DGCA, as they maintain data on the minimum and maximum tariffs for all routes across all airlines to monitor airfares.**

4.1.4 In the fifth meeting of the Expert Group, it was decided to collect prices for the first application in a civil suit under the item "Legal Expenses." Expert Group recommended to gather information from the Field offices on how they are capturing the prices for this item and to issue a common procedure to all the field offices for collecting prices for this item. It was advised that the prices may be collected in such a manner that these could be replicated when regular data is collected for each month in future and correctly capture price change.

4.1.5 **EG suggested that inclusion of item 'Legal Expenses' in the item basket should be decided after analyzing the base prices received for this item, even if the expenditure for this item from HCES suggests its inclusion in the final list**.

4.1.6 EG was apprised that the new Electricity module has been deployed on both the rural and urban portals, with electricity prices being collected only from the state capital ROs, as the rates charged by DISCOMs are uniform within their areas of operation across the State/UT. The EG members raised a concern that not all DISCOMs in a State are present in the State capital RO, questioning how prices from all DISCOMs in the State would be collected. In response, the PSD team clarified that the State capital ROs will be

responsible for collecting electricity prices from all DISCOMs operating within the State in consultation with the concerned ROs of the State/UT. **EG agreed with the procedure adopted by PSD for data collection**.

5. Dissemination of State level Item Indices in public domain

5.1 PSD team informed EG members that as per the present practice, Item level indices at All India level and Group/ Sub group level indices at All India and State level are disseminated in public domain. RBI has now requested to share the State level Item Indices as this would be helpful in providing inputs to the deliberations held during Monetary Policy Committee meetings.

5.2 PSD team further mentioned that the reason for not disseminating these indices was taken by Technical Advisory Committee on Statistics on Prices and Cost of Living in the beginning of the existing series to avoid confusion among the data users, as the index of few items is compiled based on a few markets only or on the basis of index of only one state.

5.3 **Expert Group suggested the Ministry may ensure transparency by releasing State level indices for Rural and Urban areas for the upcoming series with an explanatory note for the users to avoid any kind of confusion. Further, All India Item Indices should also be released separately for Rural, Urban and Combined, rather than releasing only Combined indices as was being done in the existing series.**

6. Treatment of PDS offtake at zero prices

6.1 The EG was informed that Under National Food Security Act (NFSA), the Central Government rolled out a new integrated food security scheme starting from 1st January, 2023 to provide free foodgrains to beneficiaries under Antyodaya Anna Yojana (AAY) and Priority Households (PHH). Priority Household (PHH) ration cards are issued to households that meet the eligibility criteria set by their state government. Each priority household is entitled to 5 kilograms of food grain per member per month. Antyodaya Anna Yojana (AAY) ration cards are issued to "poorest of poor" households. This scheme is expected to benefit to 81.35 crore beneficiaries with free food grains.

6.2 Under existing CPI series, Public Distribution System (PDS) prices, also known as Fair Price Shop prices, are collected in respect of four items *viz.* Rice–PDS, Wheat/Wheat-atta–PDS, Sugar-PDS and Kerosene-PDS. These are collected in respect of three groups

of beneficiary households *viz.* Above Poverty Line (APL), Below Poverty Line (BPL) and Antyodaya Anna Yojana (AAY) households. The Government is of the view that the welfare measures or social transfers benefits given by the Government, in terms of free distribution of food items, are not properly captured in compilation of CPI & Inflation.

6.3 It was also mentioned that as per the existing practice, if the free distribution of PDS items start in the middle of the series, such items are treated like seasonal products, wherein if the item is not available the weight of that particular item is pro-rata distributed among other items of that section. This method is one of the three methods prescribed in the Consumer Price Index Manual: Concepts and Methods 2020 (page 35) by the Multilateral Agencies. PSD team proposed to use Method-1 of the manual which is to use a zero price and adjustment of the weight during next update. **Expert Group agreed to the same**.

6.4 The EG deliberated on the matter and concerns of the Government also. The EG noted that as highlighted in para 2.60 of CPI manual 2020 "*CPI should be confined to final consumption expenditure incurred by the households, in which case free social transfers in kind would be excluded from the scope of the index*". In view of this, **EG recommended to not include the items distributed free in the item basket as these items have no expenditure share. Further, EG also recommended that in case some PDS items are sold with some minimum price in some States for some particular category, they may be included in the revised CPI basket. However, in future, if price of these items become zero or they are also distributed free Method-1, as proposed by PSD, will be followed for compilation of index.**

6.5 To address the concerns of the Government for capturing free social transfers and to measure the actual impact of inflation on households after incorporating the benefits provided by the Government, EG further suggested to explore possibility of compilation of an index similar to Cost of Living Index (COLI) which would include the entire set of goods and services consumed by the designated households from which they derive utility. It includes the goods and services received free as social transfers in kind from Governments or NPISH as per para 2.85 of CPI manual 2020. A detailed discussion on the methodology of compilation of such an index would be required after initial exploratory exercise was carried out by PSD.

7. Treatment of missing prices

7.1 PSD team informed EG members about the current practice adopted to deal with missing prices due to temporary reasons and permanent reasons. For missing prices of

non-fruits and vegetables due to temporary reasons in a month, prices of the current month are imputed from the previous month's price assuming that the price change for the missing quotation is same as the price changes in the item observed in other quotations. This imputation is done for one month only and the imputed prices are not carried forward. For prices missing due to permanent reasons, quality adjustments are done before compilation of index.

7.2 EG expressed that, the imputation in case of temporary missing prices can only be done if previous month's price is available. It cannot be done otherwise**. EG suggested to use base price changes for imputation of missing prices in the second month and future months till the actual price reporting restarted.**

7.3 **EG also mentioned that the case of missing prices due to seasonality and re-distribution of weights in compilation of index needs a separate discussion altogether and this may be discussed in the upcoming meetings of the EG.**

8. Weighted average for electricity index:

8.1 To make CPI electricity index more robust and effective, it is proposed to take weighted average of all the three consumption brackets (i.e. first 100 units, first 200 units and first 300 units). Since this data is not available in HCES 2022-23, EG advised PSD to seek the distribution of consumers by the above mentioned three categories by State X DISCOM X sector from Ministry of Power. Once the data is received, the same may be explored suitably for inclusion in the compilation of electricity index in the new series.

9. Core Inflation

9.1 Expert Group was apprised that the Ministry did not release an official core inflation figure. Multiple agencies including Reserve Bank of India are calculating Core Inflation immediately after the release of Headline inflation by MoSPI every month. Since there is no standard methodology, different core inflation numbers are generated by different agencies creating confusion in the market. It is, therefore, felt to examine and discuss the feasibility of compilation and release of core inflation by MoSPI along with the monthly release of headline and food inflation.

9.2 Three methods for calculating core inflation were proposed by PSD team. First method included weighted average approach at Group level by excluding Groups- 'Foods and Beverages' and 'Fuel and Light'. The second method includes weighted

average approach at item level excluding Groups- 'Foods and Beverages' and 'Fuel and Light' and items- 'Petrol for Vehicle' and 'Diesel for Vehicle'. The third method includes weighted average approach at item level excluding Groups- 'Foods and Beverages' and 'Fuel and Light' and items- 'Petrol for Vehicle' and 'Diesel for Vehicle' with re-distribution of weights of the item for which index has not been formed at All India level.

9.3 **EG was of the view that since there is no internationally accepted standard definition of core inflation, MoSPI should not publish core inflation as it may be interpreted in different ways by different stakeholders. Further, MoSPI may first resolve the issues related to redistribution of weights and thereafter, may decide on the issue or need of publishing some indices excluding food and fuel, as was the practice adopted by RBI and NSOs of many other countries.**

10. Preparation of weighting Diagram

10.1 Due to paucity of time, it was decided to cover this agenda in the next meeting of the Expert Group. However, **the Expert Group suggested to calculate the weighting diagram using the HCES 2022-23 data excluding the samples selected under the stratum 99 for both All India as well as State levels.**

11. The summary of the recommendations of EG in this meeting is presented below: -

a. Airfare prices for newly added routes in 11 cities for previous months (January to July) may be obtained from DGCA, as they maintain data on the minimum and maximum tariffs for all routes across all airlines to monitor airfares.
b. A common procedure for collecting prices of the item 'Legal Expenses' may be issued to all the field offices.
c. Inclusion of item 'Legal Expenses' in the item basket may be decided after analyzing the base prices received for this item, even if the expenditure for this item from HCES suggests its inclusion in the final list.
d. Item indices for each State separately for rural and urban sectors may be disseminated by the Ministry for the new series with a note for the users to avoid any kind of confusion. All India Item Indices should also be released for Rural, Urban and Combined sectors.
e. Method 1 of the CPI manual may be used for treatment of PDS offtake at zero prices.
f. Base year prices may be used for imputation of missing prices.
g. Re-distribution of weights for seasonal items in compilation of index may be discussed separately.

h. Distribution of consumers as per the three categories of electricity consumption by State X DISCOM X sector may be obtained from Ministry of Power.
i. Since there is no standard definition of core inflation, MoSPI should not publish core inflation as it may be interpreted in different ways by different stakeholders. Further, MoSPI may first resolve the issues related to redistribution of weights and thereafter, may decide on the issue or need of publishing some indices excluding food and fuel etc.
j. Weighting diagram Using HCES 2022-23 data may be prepared by excluding Stratum 99 for All India as well as at state level.

12. Due to paucity of time, it was decided to cover rest of the agenda in the next meeting of the Expert Group.

13. The Expert Group also expressed that in view of the importance of activities being undertaken by PSD for the base revision and the enormous amount of additional work involved, PSD should be adequately strengthened to smoothly and accurately complete the exercise in a timely manner to the best of the satisfaction of all stakeholders.

14. The meeting ended with the Vote of thanks to the Chair.

****

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. Alok Chandra, DG (Labour Bureau), Ministry of Labour and Employment
3. Mr. Siddhartha Kundu, ADG, SDRD, NSO, MoSPI
4. Dr. A. R. Joshi, Principal Adviser, DSIM, RBI
5. Dr. Praggya Das, Adviser, Monetary Policy Department, RBI
6. Dr. Himanshu, Professor, CESP, SSS, JNU
7. Mr. D. K. Sinha, DDG, NAD, NSO, MoSPI
8. Mr. Rajesh Kumar, DDG, DPIIT, Ministry of Commerce and Industry
9. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI- Member Secretary
10. Mr. Deepak Mehra, DDG, Labour Bureau, Ministry of Labour and Employment

Other Participants:

11. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
12. Ms. Monami Mitra, Director, PSD, NSO, MoSPI
13. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
14. Mr. Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
15. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
16. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
17. Ms. Jyoti, Jr. Statistical Officer, PSD, NSO, MoSPI

S-11015/4/2022-PSD-Part(4)
Government of India
Ministry of Statistics and Programme Implementation
National Statistics Office
Price Statistics Division

Khurshid Lal Bhawan, New Delhi
Dated: - 04/12/2024

Subject: Minutes of the seventh meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The seventh meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 6th November, 2024 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**. The Committee was reconstituted in September, 2024 and two new academic experts joined the EG. To apprise new members about the decisions taken so far and progress on the base revision work, the Chair suggested to share the minutes of the last meetings with the new EG members. The CPI manuals and reports of last base revision of CPI was also requested to be shared with the new members for providing more insights on the exercise.

Director General (Central Statistics) also attended the meeting for some time and requested EG to ensure robust compilation methodology of the new CPI series.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

- Action taken report on the decisions taken during sixth EG meeting
- Preparation of Weighing Diagram
- Treatment of temporary and permanent missing prices
- Status of Online Price collection from FOD

The detailed agenda note of the meeting is attached at **Annexure-II**.

3. DDG (PSD) briefed the EG about the Terms of Reference of the Expert Group and the progress made so far on the base revision of CPI. Thereafter, DDG(PSD) gave a presentation on the actions taken in on the recommendations made during its sixth meeting. Additionally, the PSD team gave a detailed presentation on the above-mentioned agenda points.

The deliberations made during the meeting are as under: -

4. Action Taken Report on the decisions taken during sixth EG meeting:

4.1.1 EG was briefed about the action taken on the decisions taken during sixth EG meeting.

4.1.2 In the sixth meeting of the Expert Group, it was recommended that the distribution of consumers as per the three categories of electricity consumption by State, DISCOM and sector wise compilation of weighted electricity index, may be obtained from Ministry of Power. EG members were apprised that a letter was sent to Secretary, Ministry of Power on 27.08.2024 followed by a reminder on 27.09.2024. However, response is yet to be received. **EG suggested that the concerned State/ UT Govt may also be requested for for DISCOM wise data according to the requirement. Chief Electricity Authority may also be approached for seeking this data.**

5. Preparation of Weighing Diagram

5.1 PSD team presented the proposed criteria for the preparation of weighing diagram. This was same as adopted during the preparation of the weighing diagram of the existing series of CPI (2012=100). The four-fold criteria proposed was as following;

iv. include all PDS items
v. include all items accounting for 1% or more of total expenditure at sub-group level.
vi. include all items accounting for more than specified percentage of total expenditure of all consumption items;

Sr. no.	Group	Group Description	% out of total expenditure
1	Group1, Group 2, Group 4, Group 6	Food and Beverages, Pan, Tobacco and Intoxicants, Housing and Miscellaneous excluding 'Bedding'	> 0.04%
2	Group 5	Fuel and Light	> 0.03%
3	Group 3	Clothing and footwear, Section 'Bedding' under sub-group 'Household Goods and Services'	> 0.02%

vii. include all items for which more than 75% households have reported consumption.

PSD team apprised the EG members that weighing diagram and item baskets of the States were prepared for the new series from unit level data of HCES 2022-23 using

the above mentioned first 4-fold criteria. The results were also shown to the EG members. Members expressed that it should be checked if any important item was not going out of basket for any State after applying the above mentioned four fold criteria.

5.3 Thereafter, PSD team explained about the criteria of Composite items adopted in the existing series. This criterion was adopted with to ensure that no important item should be missed in the basket as they may get reasonable weights in the subsequent base revisions. As per this criteria, certain important items are included for pricing even though the same are not being retained in the weighting diagram as such. For this purpose, expenditure against those items are clubbed together and put along with the weight of —'other' item of the same subgroup (if selected using four fold criteria) provided their combined weight is more than 0.5% at sub group level. The simple arithmetic mean of price relatives of these items was used with combined weight of these items for compilation of index.

5.4 PSD team proposed to drop this criterion as this may add more priced items in the basket. PSD also highlighted that in the current series though weighted items at all India level for rural and urban sector are 281 and 287 respectively but priced items for the same sectors at national level are 448 and 460. Since in HCES, the number of items captured are 405 vis-a-vis 347 items in CES 2011-12. The inclusion of composite items may add more burden of data collection by field staff of FOD. State-wise composite items may also to be recorded and treated carefully while developing the compilation software as the compilation process may be different for these items. The requirement and relevance of composite items criteria was discussed in detail.

5.5 The EG members were of the view that this composite item criteria provides an opportunity to include the important items which may be left out with a slight margin after applying the four fold criteria. Hence, instead of taking all the clubbed weighted items and priced items of the 'other' category for pricing, only weighted items clubbed with the 'other' may be considered for pricing. To understand the quantum of work load due to inclusion of such items, PSD was also advised to conduct the analysis to know the exact increase in the number of items due to inclusion of composite items. In this exercise, lead items may along with other items may be identified and presented during next EG meeting.

Decision: EG approved the four fold criteria for preparation of weighing diagram. Further, PSD may conduct the analysis to know the exact increase in the number of items due to inclusion of composite items. A state wise count of markets on the items which are included but prices are reported zero in the market may be prepared by PSD. PSD may also prepare an analysis on state wise and item wise count of quotations from where prices are being reported in the base revision exercise. This may be presented before the committee during the next meeting.

6. Treatment of missing prices

6.1 PSD team informed EG about the current practice adopted to deal with missing prices due to temporary reasons and permanent reasons. For missing prices of non-fruits and vegetables due to temporary reasons in a month, prices of the current month are imputed from the previous month's price assuming that the price change for the missing quotation is same as the price changes in the item observed in other quotations. This imputation is done for one month only and the imputed prices are not carried forward. For prices missing due to permanent reasons, quality adjustments are done before compilation of index.

6.2 In the sixth meeting of the EG, it was suggested to use base price changes for imputation of temporary missing prices in the second month and future months till the actual price reporting restarted. For the first month, previous month's price may be used.

6.3 Discussion on case of missing prices of an item in the all the markets of the entire State/UT due to seasonality and re-distribution of weights was held in detail.

6.4 PSD team showed an analysis to the EG members depicting the fluctuation in index of a section/ subgroup due to weight re-distribution in case of missing prices of an item in all the markets of a State due to seasonality.

Decision: EG members expressed that the existing practice of dealing with such cases i.e. weight re-distribution is in accordance with the International guidelines and the same should continue except for PDS items. In case, PSD faces any challenge, the same may be raised in future meetings too. In the meantime, PSD may also explore best practices adopted by the other countries.

7. Status of Online Price Collection from FOD

7.1 Expert Group, in its third meeting recommended to explore the feasibility of online price collection from 12 towns with population exceeding 25 lakhs.

7.2 Concerned field offices have accordingly mapped one original e-commerce website and 2 reserve e-commerce websites against the items available across the popular e-commerce websites in the town

7.3 The town wise status of items marked available in e-commerce platforms and count of items for which prices have been reported by field offices was shared with the EG members.

Decision: The EG noted the progress. It also suggested to conduct a comparative study of the price movements in ecommerce Vis a vis prices collected from the physical shops for some towns for better understanding of the data.

8. The summary of the recommendations of EG in this meeting is presented below:-

a. To share the minutes of the last meetings and CPI manuals and reports of last base revision of CPI to apprise new members about the decisions taken so far and progress on the base revision work.
b. For consumption bracket wise weights of electricity, the concerned State/ UT Govt may also be requested for getting State/UT DISCOM wise required data. Chief Electricity Authority may also be approached for seeking this data.
c. To check if any important item was not going out of basket of any State after applying the above mentioned four-fold criteria.
d. EG approved the four-fold criteria for preparation of weighing diagram.
e. To conduct the analysis to know the exact increase in the number of items due to inclusion of composite items. A state wise count of markets on the items which are included but prices are reported zero in the market may be prepared by PSD.
f. PSD may also prepare an analysis on state wise and item wise count of quotations from where prices are being reported in the base revision exercise. This may be presented before the committee during the next meeting.
g. In the matter of calculation of section / subgroup indices when one or two item indices are not formed, the existing practice of dealing with such cases i.e. weight re-distribution is in accordance with the International guidelines and the same should continue except for PDS items.
h. To conduct a comparative study of the price movements in ecommerce vis-a-vis prices collected from the physical shops for some towns for better understanding of the data.

9. The meeting ended with the vote of thanks to the Chair.

****

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. Alok Chandra, DG (Labour Bureau), Ministry of Labour and Employment
3. Mr. Rajkumar, ADG, PSD, NSO, MoSPI
4. Dr. A. R. Joshi, Principal Adviser, DSIM, RBI
5. Dr. Praggya Das, Adviser, Monetary Policy Department, RBI
6. Mr. Rajesh Kumar, DDG, DPIIT, Ministry of Commerce and Industry
7. Dr. Himanshu, Professor, CESP, SSS, JNU
8. Dr. Sanket Mohapatra, Professor, IIM Ahmedabad
9. Dr. Prachi Mishra, Professor, Department of Economics, Director and Head, Ashoka Isaac Center for Public Policy, Ashoka University.
10. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI

Other Participants:

10. Mr. N. K. Santoshi, DG(Central Statistics), NSO, MoSPI
11. Mr. Deepak Mehra, DDG, Labour Bureau, Ministry of Labour and Employment
12. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
13. Mr. Rohit Naagar, Deputy Director, PSD, NSO, MoSPI
14. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
15. Mr. Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
16. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
17. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
18. Mr. Anil Kumar, Jr. Statistical Officer, PSD, NSO, MoSPI

FNo. S-11015/4/2022-PSD-Part(4)
Government of India
Ministry of Statistics and Programme Implementation
National Statistics Office
Price Statistics Division

Khurshid Lal Bhawan,
Janpath, New Delhi
Dated: 21/02/2025

Subject: Minutes of the eighth meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The eighth meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 30th January, 2025 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**. Secretary, MoSPI also joined the meeting and requested EG to assess the feasibility of incorporating online prices in the new series and ensure robust compilation methodology of the new CPI series.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

I. Presentation by GDi partners on Alternative Data Sources for CPI

II. Action taken report on the decisions taken during seventh EG meeting

III. Adoption of COICOP 2018 in New Series

IV. Preparation of Weighing Diagram

V. Index Compilation Methodology

VI. Collection of Rail fare data, online streaming services related items completely from Online sources

The detailed agenda note of the meeting is attached at **Annexure-II**.

3. Presentation by GDi partners on Alternative Data Sources for CPI

3.1. GDi partners gave a brief presentation on progress made so far on the Alternative data sources of CPI. In their presentation, GDi team shared approaches adopted by other countries on inclusion of alternative data into CPI estimation. Case studies of different countries were also presented.

3.2 The GDi team highlighted that it countries took nearly a decade to integrate alternative data sources into CPI estimation, and even then, the integration could not be fully done. Currently, alternative sources are used for only a few items across countries, such as airfare, postage, gasoline, and apparel. To achieve this, most of countries had to formulate regulations and mechanisms to get regular timely data from companies.

3.3 The GDi team proposed a phased approach, starting with the identification of data sources and a risk assessment to evaluate challenges in data sharing by companies. This would be followed by the implementation of a regulatory framework, negotiations with data providers, and the signing of MoUs. Once these steps are in place, implementation may be started in urban sector, with continuous engagement with companies to ensure timely data delivery.

3.4 The GDi team presented a list of alternative data sources for various subgroups and emphasized prioritizing collaboration with easily accessible firms. They suggested engaging first with organizations such as IOCL, BPCL, and HPCL for petrol and diesel prices, IRCTC for railway fares, and platforms like BookMyShow for "cinema: new release." Simultaneously, efforts should continue to collect data from more fragmented sectors. GDi also suggested to organize a conclave with the potential data providers to encourage collaboration.

3.5 The Expert Group recognized the efforts of the GDi team and emphasized the need for a regulatory framework to facilitate regular data collection from e-commerce companies. They requested DPIIT to assist MoSPI in formulating this framework while

ensuring that MoSPI retains its autonomy in communications with these companies. Expert Group also recommended that MoSPI may consider organizing a Conclave with higher officials of e-commerce companies and other stakeholders.

4. Action Taken Report on the decisions taken during seventh EG meeting:

4.1. EG was briefed about the action taken on the decisions taken during sixth EG meeting.

4.2. For consumption bracket-wise electricity weights, the Expert Group recommended reaching out to the Planning Secretaries and the Secretaries of Power from State/UT governments to obtain the necessary data. Additionally, PSD may also explore the possibility of approaching individual DISCOMs for relevant data.

5. Adoption of COICOP 2018 in New Series

5.1. PSD team presented the difference in number of categories in COICOP 2018 from COICOP 1999.

5.2. Expert Group was apprised that the existing series of CPI uses COICOP 1999 and has 6 major Groups and 23 Subgroups. To adopt COICOP 2018, meticulous efforts will be required by PSD for developing back series using the revised system. Similar changes will also need to be incorporated in the on-going development of CAPI modules for price data collection. With that, there might also be a possibility of non-alignment of CPI with other indices i.e. CPI (AL/RL), CPI (IW), WPI, GDP. Furthermore, the PSD team highlighted challenges in categorizing CPI items under the various divisions, classes, and subclasses of COICOP 2018. Specifically, for some weighted items, different priced items may fall into separate categories, creating inconsistencies in classification.

Recommendations of EG: Expert Group recommended for adopting COICOP 2018 to the extent possible. Communication may also be sent to the Ministries/divisions of other divisions for adoption of COICOP 2018 in their respective indices. Same may be presented in the next EG meeting.

6. Preparation of Weighing Diagram

6.1. Weighing Diagram after applying first four-fold criteria was shown to the Expert Group. Expert Group was apprised that out of 374 weighted items (excluding free items and individual items of Coarse Grains) of HCES, 363 items retained at all India level and out of 686 priced items (including PDS - 70, Electricity - 3, Airfare -1 and House rent-1), 674 items retained. State and sector wise count of total items and number of items retained was shown to the Expert Group.

6.2. State, sector, item wise weights, All India item-wise weights, All India and State-wise Group Subgroup weights were shown to the Expert Group. An exercise on State-wise and sector-wise increase in the number of items after applying composite items criteria was also done by PSD team and shown to the Expert Group.

6.3. The Expert Group discussed the issue of Composite items and stated that items not included in the basket but meeting the Composite criteria are merged with the corresponding Composite items, becoming priced items for a specific State and sector. However, the same item may be part of the basket in a different State and sector, where it functions as a weighted item. This variation could lead to comparability challenges.

6.4. The discussion was also held on 'Other' items in HCES. The committee members noted that, any unspecified items in HCES could be mapped to this category, enabling their prices to be reported. Further, in many cases the 'Other' category comprises multiple priced items. This could lead to erratic inflationary movements across states or between sectors with in states, making the values non-comparable. To address this, the Expert Group recommended to remove all the 'Other' items from each section and redistributing its weight among the remaining items in the same section. This category includes items such as "Cereal Substitutes: Tapioca (139)" and "Other Consumer Taxes & Cesses (899)," among others. After this adjustment, the first fourfold criteria should be applied.

6.5. PSD appraised the committee about two items namely- "Cooked meals received free in workplace (281)" and "Cooked meals received as assistance (282)" are received free but have imputed expenditure in the results of HCES. A decision on whether to include the expenditure of these items while preparing weighing diagram was asked from the Expert Group. Expert Group recommended that imputed expenditure should not be considered while deriving the weights. Hence, these two items along with their expenditure should be dropped while deriving the weights.

Recommendations of EG: The Expert Group suggested the PSD team to recalculate the weights after excluding all 'Other' items from HCES item list and to redistribute these weights among the remaining items within the same section. Once the 'Other' items are removed, the first fourfold criteria should be applied. The Expert Group also recommended considering only the items that meet the fourfold criteria, without creating any composite items for the new series. Additionally, a list of newly included and excluded items for the new series may be presented in the next meeting

7. Index Compilation Methodology

7.1. Issue in compilation of higher-level indices, when lower level index is not available, was presented to the Expert Group. Expert Group was apprised that with the current approach of dealing with this case in existing series, non-formation of a lower level index sometimes leads to an un-usual variation in the higher-level index even when other lower-level indices remain same. This variation is un-explainable.

7.2. Five different methods of dealing with this case was shown to the Expert Group including the one adopted in the existing series.

7.2.1 First method is "Weight Redistribution method" which is adopted in the current series. In this method, if one or more indices are unavailable, the weights of such items are redistributed pro-rata basis among other items of the same section for which indices are available. The higher-level index is then calculated using the available lower-level indices and the adjusted weights.

7.2.2. Second method is "Imputation method where the imputation factor is based on the Month-on-Month movement of other items in the section/subgroup (Geometric mean of Month-on-Month movement of other items in the section).

7.2.3. Third method is "**Index imputation method".** This imputation approach used the following formulae which is adopted during the COVID pandemic by MoSPI.

- Imputed Sub-group Index (Food Group) =

  (Last Observed Index of Sub-group) x (Food Index of Current Month/Food Index of last Observed Month)

- Imputed Sub-group Index (Non-Food Group) =

  (Last Observed Index of Sub-group) x (General CPI of Current Month/General CPI of last Observed Month).

7.2.4. Fourth method is "Index Imputation based on Base Indices". In this method, the index is imputed using the following formula-

Imputed Index = (Base index of the missing item=100) X (current month fruit) / (Base Index of fruit=100)

Which is same as replacing the missing indices with the higher-level indices.

7.2.5. Fifth method is "Carrying forward the last available index of the missing item". In this method, the missing index value is replaced by repeating the last available index for the item.

Recommendations of EG: After discussing the computation of illustrations for each of the above methods, the Expert Group recommended that generalised illustrations, applicable for all scenarios, may be examined and presented by PSD for Method-I and Method-II in the next meeting.

8. Collection of Rail fare data, online streaming services related items completely from Online sources

8.1. Expert Group was apprised that PSD is currently collecting all airfare prices from online platforms for the new series. It was also informed that more than 50% quotations' prices for rail fare and online media service provider/streaming services charges are also reported through online platforms for the new series. Direction of Expert Group was sought on whether prices of these items may be collected solely from online platforms?

Recommendations of EG: The Expert Group recommended that the prices of railway fares and online media service provider/streaming services charges may be collected exclusively from online platforms. Additionally, the Expert Group suggested that the PSD team may explore the feasibility of obtaining petrol and diesel prices also from the websites of IOCL and other relevant agencies, as some platforms provide pump-wise pricing. The website of the Petroleum Planning and Analysis Cell (PPAC) should also be reviewed, as it maintains fuel price data.

9. The summary of the recommendations of EG in this meeting is presented as under;

a. DPIIT was requested to assist MoSPI in formulating framework for accessing data for including in CPI, while ensuring that MoSPI retains its autonomy in communications with these companies. Expert Group also recommended that MoSPI may consider organizing a Conclave with higher Officials of e-commerce companies and other stakeholders.
b. PSD may reach out to the Planning Secretaries and the Secretaries of Power from State/UT governments to obtain consumption bracket-wise electricity weights. Individual DISCOMs may also be contacted.
c. COICOP 2018 may be adopted in CPI to the extent feasible.
d. All 'Other' items in HCES may be removed from the item lists, and their corresponding expenditure shares may be redistributed among the remaining items within the same section. The fourfold criteria should be applied after this adjustment.
e. The items "Cooked meals received free at the workplace (281)" and "Cooked meals received as assistance (282)" and their associated expenditures may be excluded when deriving the weights of other items.
f. Only items meeting the fourfold criteria may be included in the CPI basket. Composite items should not be considered for the new series.

g. A list of newly included and excluded items for the new series may be presented in the next meeting.
h. Additional illustrations for Method-I and Method-II of compilation, in cases where lower-level indices are not formed, may be presented in the next meeting of the Expert Group.
i. In addition to the airfare, prices for railway fares and online media service provider/streaming services charges may be collected exclusively from online platforms for the new series.
j. The feasibility of collecting petrol and diesel prices from IOCL and other relevant agencies' websites may be explored, as some platforms provide pump-wise pricing.

10. The meeting ended with the vote of thanks to the Chair.

******

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Shri Ashish Kumar, Former Director, UNSIAP, Former DG(CSO), MoSPI
2. Shri Siddhartha Kundu, ADG (HSD), MoSPI
3. Shri Rajkumar, ADG, PSD, NSO, MoSPI
4. Dr. A. R. Joshi, Principal Adviser, DSIM, RBI
5. Dr. Praggya Das, Adviser, Monetary Policy Department, RBI
6. Shri Rajesh Kumar, DDG, DPIIT, Ministry of Commerce and Industry
7. Dr. Himanshu, Professor, CESP, SSS, JNU
8. Dr. Prachi Mishra, Professor, Department of Economics, Director and Head, Ashoka Isaac Centre for Public Policy, Ashoka University.
9. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI

Other Participants:

10. Mr. Anil Kumar Sharma, DDG, Labour Bureau, Ministry of Labour and Employment
11. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
12. Mr. Ram Sajeevan, Director, PSD, NSO, MoSPI
13. Mr. Saquib Hasan, Assistant Adviser, RBI
14. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
15. Mr. Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
16. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
17. Ms. Poonam Singh Chauhan, Assistant Director, PSD, NSO, MoSPI
18. Mr. Deepak Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
19. Mr. Kaushalendra Kumar Mishra, Jr. Statistical Officer, PSD, NSO, MoSPI
20. Mr. Anil Kumar, Jr. Statistical Officer, PSD, NSO, MoSPI
21. Ms. Jyoti, Jr. Statistical Officer, PSD, NSO, MoSPI
22. Mr. Amit Kumar Singh, Jr. Statistical Officer, PSD, NSO, MoSPI
23. Mr. Rahul Vishwakarma, Software Developer, PSD, NSO, MoSPI
24. Mr. Radhey Mohan Shukla, Software Developer, PSD, NSO, MoSPI
25. Mr. Faraz Khan, Young Professional, PSD, NSO, MoSPI

FNo. S-11015/4/2022-PSD-Part(4)
Government of India
Ministry of Statistics and Programme Implementation
National Statistics Office

Price Statistics Division
Khurshid Lal Bhawan,
Janpath, New Delhi
Dated:03.04.2025

Subject: Minutes of the ninth meeting of Expert Group (EG) for Base Revision of Consumer Price Index.

The ninth meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 27th February, 2025 in Conference Room No. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**.

2. At the outset, the Chairperson welcomed the participants and introduced Shri Anujit Mitra, Adviser, DSIM, RBI, who has joined the EG in place of Dr. A.R. Joshi, and Shri Indranil Bhattacharya, Adviser, MPC, RBI, who has accompanied Dr. Praggya Das. The Chairperson then briefed the EG members about the following agenda points to be discussed during the meeting:

I. Action taken report on the decisions taken during eight EG meeting
II. Preparation of Weighing Diagram
III. Compilation of higher-level indices in the case of one or more lower level index is not available
IV. House Rent Index
V. Inclusion of PDS items in CPI

The detailed agenda note of the meeting is attached at **Annexure-II**.

3 Action taken Report based on the decisions taken at eight EG meeting

3.1 EG was briefed about the following actions taken on the decisions of 8th EG meeting;

3.11 The PSD team has started discussions with e-commerce companies, NSOs having experience of integrating alternative data sources in CPI and with the companies working in the area of commercial web scraping. Further, MoSPI is planning to organize a conclave on the use of alternative data sources in collaboration with the World Bank. It is also planned to have a dedicated session on the use of scanner data in this conclave.

3.12 EG was also briefed that the PSD is in the process of exploring the possibilities of capturing "railway fare and online media service provider/streaming services charges" items through online platforms. **EG recommended to go ahead with the online data collection for "airfare, rail fare and online media service provider/streaming services charges" for the new CPI series. Process for the same may be explored by PSD.**

3.13 MoSPI has received slab-wise electricity consumption data from CERC. This data has been examined and it is found that requisite date for few States/UTs is not provided and PSD will expedite the remaining information from CERC. **EG recommended that PSD may expedite the remaining information from CERC so that same may be incorporated in the electricity index compilation methodology.**

4 Preparation of Weighing Diagram:

4.1 The weighing diagram, after applying the first four-fold criteria and removing the "Other" items, as well as four additional items (clothing: first hand – other (including knitting wool) (374), clothing: second hand (375), footwear: second hand (395), books, journals, etc.: second hand), was shown to the EG. The EG was informed that after application of afore-mentioned criteria, at the All India level (Combined), a total of 305 weighted items have been selected, in which 302 items are common for both rural and urban areas.

4.2 It was also informed that the expenditure of the items removed has been reallocated to the items available within a particular section to ensure that the total expenditure within the section and overall total expenditure remains unchanged.

4.3 The discussion was held on the 'other' items in HCES and weighing diagram after removing 'other' items. It was apprised that total weight of all 'other' items is around 4 percentage in both rural and urban sector. The committee member noted that there are some 'other' items which have significant weights so removing these items may have adverse impact on representativeness of CPI basket. Therefore, EG recommended that after applying the four-fold criteria, items that are not selected may be excluded from the CPI basket for the new series.

4.4 Deliberations were also held on the suggestions of merging the weights of items not selected through the four-fold criteria with the other similar items rather than the weights being distributed within the subgroup. However, there was no consensus on this issue, as identifying similar items and increasing the share of a single item raised concerns.

4.5 The inclusion of items in the All India basket was discussed, noting that some items are reported only from one or two small states yet become part of the All India item basket. However, in some cases, the index is compiled using only one or two price points. The committee recommended reviewing this issue after finalizing the weighting diagram and suggested that PSD may examine such cases and provide its recommendations accordingly.

4.6 The members also discussed the release of the latest HCES report, and they unanimously recommended using the latest HCES 2023-24 results instead of the

HCES 2022-23 data for calculating weights and preparing the item basket for the new CPI.

Recommendations of EG: The Expert Group recommended that. PSD may redo the exercise of preparing the weighting diagram by including the "Other" items. After applying the four-fold criteria, any items not selected may be excluded from the CPI basket for the new series. Further, since the HCES 2023-24 data is now available, the weights and item basket should be derived using this data. This will also reduce the gap between the reference period for the weights and the Base prices.

The committee recommended to review the issue of inclusion of items of the All India basket based on the weights received from 1 or 2 small states or prices are being reported from very few markets. This exercise may be done after applying the four-fold criteria and inclusion of other items in the weighing diagram. Further, PSD may examine such cases and provide its recommendations accordingly.

5 Compilation of higher-level indices in case of one or more lower level indices are not available:

5.1 As per the EG's recommendation in the 8th meeting PSD team presented the following illustration of method I and method II based on the actual data.

5.11 First method was the “Weight Redistribution method” which was adopted in the current series. In this method, if one or more indices are unavailable, the weights of such items are redistributed pro-rata basis among other items of the same section for which indices are available. The higher-level index is then calculated using the available lower-level indices and the adjusted weights.

5.12 Second method was the “Imputation method where the imputation factor is based on the Month-on-Month movement of other items in the section/subgroup (Geometric mean of Month-on-Month movement of other items in the section).

5.2 In addition to the above methods, PSD team also presented an additional method which is an improvement of Method II. In the new method, the imputation factor is calculated using the weighted Arithmetic mean (or Geometric mean), where weights are the item weights corresponding to each item.

Items	Weight in (%)	Jan index	Feb index	Index Ratio (4)/(3)	revised weights	weighted Index ratio (5)*(6)	Imputed Index	Feb Index=Imputed Index * weight { (8)*(2)}
1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**
Apple	18	110	110	1	21.18	21.18	110	1980
Mango	15	200					200 (January Index * Imputation factor)	3000
Bananas	25	116	116	1	29.41	29.41	116	2900
Guava	22	105	105	1	25.88	25.88	105	2310
Papaya	20	80	80	1	23.53	23.53	80	1600
Total	**100**				**100**	**100**		**11790**
Weighted AM or GM						1 (imputation factor)		
Index Fruit		**117.9**						**117.9**

Recommendations of EG: The Expert Group recommended for adopting the imputation method based on weighted Month on Month Movements of all other items in the section/ subgroup as given in para 5.2 above. The EG, further, recommended that in the press release for a month the items for which the index was imputed only for the calculation of higher-level indices should be highlighted. PSD may consider whether the imputed index of the missing items can be published.

6. **House Rent Index:**

6.1 PSD team presented a brief note on methodology used for the calculation of the House Rent Index in current series before the Expert Group. PSD team also presented an illustrative example for calculating House Rent (HR) Index before the EG highlighting the issue in the Month over month movement in housing indices. The issue of the abrupt changes in the HR index in the month of July and January in the current series was also shared with the EG.

Recommendation of EG: The Expert Group suggested for having a detailed discussion on the House Rent Index in its next meeting. In the meantime, PSD team may explore the possibilities of alternative methods for compilation of House Rent index. The same may be presented in future meeting of the committee.

7. **Adoption of COICOP 2018 in CPI**

7.1 PSD team informed the EG that the division is working on mapping the items with the COICOP 2018 classification. The COICOP 1999 was partially applied in the current CPI series, however, efforts will be made to adopt COICOP 2018 in the new series to the extent possible. It also stated that once the mapping is completed, it will be shared with HnSD and NAD for comments. Further, EG was also apprised that in the event of adopting the COICOP 2018 classification in CPI, the four-fold criteria used for preparing the weighting diagram will need to be reviewed.

Recommendations of EG: The Expert Group recommended to incorporate the COICOP 2018 classification to the extent possible in the new CPI series. The necessary modifications to the four-fold criteria for preparing the weighing diagram may also be worked out and shared with the EG for guidance.

EG also highlighted that adoption of COICOP 2018 would lead to the huge amount of work for the back series of CPI and sensitization of users, stakeholders and public at large before releasing the series.

8. **Suggestion on Discussion Note on PDS**

8.1 The EG was informed that in view of launch of Pradhan Mantri Grameen Kalyan Anna Yojana by the Central Government in January, 2023, the users especially the Finance Ministry, Reserve Bank of India and Department of Food and Public Distribution raised concerns regarding true reflection of the impact of this scheme on inflation measured through CPI. To deliberate on the issue, a brainstorming session was organised by PSD in November, 2024. Academicians, experts, professionals, users and senior officers from the concerned Ministries and from Reserve Bank of India were invited to deliberate on the matter.

8.2 Thereafter, PSD prepared a discussion note and put it on the MoSPI's website for broader consultation and seeking views of public at large. The comments received from academicians, former Chief Statistician, ISS officers, and the Reserve Bank of India on the discussion note regarding treatment of PDS and other free items in compilation of CPI was presented to the EG for further deliberations.

Recommendations of EG: The EG noted the views of the various stakeholders. It further directed the PSD team to work on the methodology as suggested by the RBI and present it to the EG in its next meeting for discussions and deliberations on the matter.

9. **Presentation on Treatment of Seasonal Unavailable Items in CPI Basket by the RBI**

9.1 The RBI team made a presentation on the treatment of seasonal unavailable items in the CPI, during which they proposed a methodology to address the missing Index due to the absence of seasonal items. A copy of the presentation is given at **Annexure- III**. A method for imputing prices of seasonal fruits, with mango as an example, using auxiliary information was suggested. The RBI representative explained that the mango prices for all twelve months could be collected from various auxiliary sources across multiple cities/regions, which would help impute the missing mango prices. However, RBI also pointed out potential challenges with the proposed methodology, including its lack of international applicability, the availability of auxiliary prices, the difficulty in mapping popular items across different cities, and the inherent bias in the movement of auxiliary prices.

Recommendation: The EG appreciated the efforts of RBI representative and encouraged other EG members to conduct similar research exercises for addressing difficult issues in CPI. Further, the members were of the view that given the challenges mentioned in the presentation, PSD may go ahead with the earlier recommendation of EG given at para 5 of the minute.

10. The Summary of recommendations of EG and actions to be taken by PSD are as under:

i. To go ahead with the online data collection for "airfare, rail fare and online media service provider/streaming services charges" for the new CPI series. Process for the same may be developed by PSD.
ii. PSD may expedite collection of the remaining information from CERC so that same may be incorporated in the electricity index compilation methodology.
iii. PSD may redo the exercise of preparing the weighing diagram by including the "Other" items. After applying the four-fold criteria, any items not selected may be excluded from the CPI basket for the new series.
iv. Since the HCES 2023-24 data is now available, the weights and item basket should be derived using this data. This will also reduce the gap between the reference period for the weights and the Base prices.
v. To review the issue of inclusion of items of the All India basket based on the basis of weights received from 1 or 2 small states or prices are being reported from very few markets. This exercise may be done after applying the four-fold criteria and inclusion of other items in the weighing diagram. Further, PSD may examine such cases and share the outcome of this exercise with the Expert Group.
vi. The Expert Group recommended for adopting the imputation method based on weighted Month on Month Movements as given in para 5.2 above. The EG

further recommended highlighting in the press release the items for which the index was imputed only for the calculation of higher-level indices. PSD may consider whether the imputed index of the missing items needs to be published.

vii. EG recommended adoption of the COICOP 2018 classification, to the extent possible, in the new CPI series. The necessary modifications to the four-fold criteria for preparing the weighting diagram may also be worked out and shared with the EG.

viii. PSD team to work on the methodology as suggested by the RBI on treatment of PDS items and present it to the its next meeting for consideration of EG.

ix. The EG members were of the view that given the challenges mentioned in the presentation made by RBI on treatment of seasonal unavailable items, PSD may go ahead with the earlier recommendation of EG given at para 5 of the minute.

11. The meeting ended with the vote of thanks to the Chair.

*****

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Shri. Ashish Kumar, Former Director, UNSIAP, Former DG(CSO), MoSPI
2. Shri. Siddhartha Kundu, ADG (HSD), MoSPI
3. Shri. Anujit Mitra, Adviser, RBI
4. Dr. Praggya Das, Adviser-in-charge, Monetary Policy Department, RBI
5. Shri Indranil Bhattacharya, Adviser, Monetary Policy Department, RBI
6. Shri. D.K. Sinha, DDG, NAD, NSO, MoSPI
7. Shri Sanket Mohapatra, Professor, IIMA
8. Dr. Prachi Mishra, Professor, Department of Economics, Director and Head, Ashoka Isaac Centre for Public Policy, Ashoka University.
9. Shri Anil Kumar Sharma, DDG, Labour Bureau
10. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI.

Other Participants:

1. Shri N.K. Santoshi, Director General(CS)
2. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
3. Mr. Ram Sajeevan, Director, PSD, NSO, MoSPI
4. Shri Sanjeev Kumar, DS, MOSPI
5. Shri Ranjith Mohan, Manager, RBI
6. Mr. Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
7. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
8. Ms. Poonam Singh Chauhan, Assistant Director, PSD, NSO, MoSPI
9. Mr. Krishan Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
10. Smt. Smita Rawat, Sr. Statistical Officer, PSD, NSO, MoSPI
11. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
12. Mr. Deepak Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
13. Mr. Prabhat Kumar Sharma, Jr. Statistical Officer, PSD, NSO, MoSPI
14. Ms. Jyoti, Jr. Statistical Officer, PSD, NSO, MoSPI
15. Mr. Kaushalendra Kumar Mishra, Jr. Statistical Officer, PSD, NSO, MoSPI
16. Mr. Rahul Raman, Jr. Statistical Officer, PSD, NSO, MoSPI
17. Mr. Naveen Dagar, Consultant Gr. II, PSD, NSO, MoSPI
18. Mr. Faraz Khan, Consultant Gr. II, PSD, NSO, MoSPI
19. Mr. Rahul Vishwakarma, Software Developer, PSD, NSO, MoSPI
20. Mr. Radhey Mohan Shukla, Software Developer, PSD, NSO, MoSPI

F.No. S-11015/4/2022-PSD-Part(2)

Government of India

Ministry of Statistics and Programme Implementation

National Statistics Office

Price Statistics Division

Khurshid Lal Bhawan,

Janpath, New Delhi

Dated:16.06.2025

Subject: Minutes of the 10th meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The tenth meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 14th May, 2025 in Board Room, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**. Secretary, MoSPI joined the meeting for some time and requested EG to assess the feasibility of incorporating free PDS items in CPI. He also emphasised that the EG must provide guidance to MoSPI for integration of alternative data sources in CPI.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

I. Action taken report on the decisions taken during ninth EG meeting

II. Weighing Diagram using HCES 2023-24 data

III. House Rent Index Compilation Methodology

IV. Consumer Price Index compilation methodology

V. Treatment of free PDS items in CPI compilation

VI. Incorporation of alternative data sources in CPI compilation

The detailed agenda note of the meeting is attached at **Annexure-II**.

3. Action Taken Report on the decisions taken during ninth EG meeting:

3.1. In the 9th EG meeting, it was recommended to collect prices for "airfare, rail fare and online media service provider/streaming services charges" from online sources. EG was apprised that a D.O. Letter from DG (CS) was sent to MD, Centre for Railway Information Systems (CRIS), Ministry of Railways on 27.03.2025 followed by a reminder on 09.04.2025 regarding collaboration on CPI-Related Rail Fare Data Collection. A response is yet to be received from them. Further, prices for Airfare and online media service provider/streaming services charges are already being collected from online platforms by field offices.

3.2. Expert Group recommended to get slab-wise electricity consumption data for remaining States from Central Electricity Regulatory Commission (CERC). EG was apprised that

reminders have been sent to CERC for getting the data of remaining States. However, the same is yet to be received.

3.3. Other action points emerged from the 9th meeting of EG were compiled and presented during the meeting.

4. Weighing Diagram using HCES 2023-24 data

4.1. Expert Group was apprised that the weighing diagram has been prepared using HCES 2023-24 unit level data as per the directions of EG.

4.2. Before deriving the weights and preparing the item basket, 3 items viz. Cooked meals received for free in workplace (**Item code- 281**), Cooked meals received as assistance (**Item code- 282**) and Illegal item Ganja (**Item code- 320**) were deleted from the data. Items 281 and 282 had imputed expenditure and EG in its 8th meeting recommended to delete it as imputed expenditure is not being considered for derivation of weights. Item Ganja (Code-320) was deleted because it is an illegal item.

4.3. Further, such items were presented before the Expert Group which have weights from HCES but could not be included in CPI priced item lists due to certain reasons. Weights of some of these items were added to the weight of similar available item in HCES and for other such items, weight was re-distributed on pro-rata basis to the other items of the concerned section. The items where weights were imputed to similar item available in HCES are given below-

Items imputed	**Items in which imputed**
076- Cooked meals purchased at subsidized rate	280-Cooked meals purchased
343- Biogas & gobar gas	346- Other fuel
410- Medicine	420-Medicine (Non-Institutional)
411- X-ray, ECG, pathological test, etc	421- X-ray, ECG, pathological test, etc (Non-Institutional)
412- Doctor's/ Surgeon's fee	422- Doctor's/ Surgeon's fee (Non-Institutional)
414- Other medical expenses	424- Other medical expenses (Non-Institutional)

The items for which weights were distributed on pro-rata basis to the other items of the corresponding section were-

139- Cereal substitutes: tapioca etc.

899- Other Consumer taxes and cesses
375- Clothing: second-hand
395- Footwear: second-hand

Expert Group noted the suggestions and agreed to implement the above imputations for finalisation of weighing diagram.

4.4. Expert Group was informed that the classification of HCES items as per COICOP 2018 was attempted by PSD. The consultation with the Administrative Statistics and Policy Division (ASPD) was also done on the matter. In view of changes in the item mapping as per COICOP, 2018, the following five-fold criteria was proposed for item basket selection which was based on the COICOP 2018 classification-

i. include all PDS items

ii. include all items accounting for 0.5% or more of total expenditure at Group level

iii. include all items accounting for 1% or more of total expenditure at Class level

iv. Include all items accounting for 15% or more of total expenditure at Subclass level

v. include all items for which more than 75% households have reported consumption

4.5. The item basket prepared using both the original four-fold criteria and the newly proposed five-fold criteria was presented to the Expert Group. It was informed that, out of the 15 Divisions, 63 Groups, 186 Classes, and 338 Sub-classes in COICOP 2018, HCES items could be mapped to 12 Divisions, 43 Groups, 93 Classes, and 160 Sub-classes. PSD further apprised the Expert Group that the suggestions were also sought from Household Survey Division (HSD) and National Accounts Division (NAD) of MoSPI. The mapping between HCES and COICOP 2018 would be finalised after considering the suggestions of these divisions, if any.

4.6. Expert Group was informed that total 358 items are being retained from the new criteria and 353 items are being retained from the existing four fold criteria. State-wise percentage of retention of items using new criteria was more than earlier criteria. For the non-selected items, sub-class level imputation of expenditure was done. Expert Group agreed to the new classification and new fivefold criteria for item basket formation.

4.7 Guidance of Expert Group was sought on such items which have got weights and are selected in the basket, but prices of these items are being reported from very few markets or from 1-2 State only. PSD team proposed to drop such items for which prices are reported from less than 10 markets at all India level and the items which are got selected in single State only. Expert Group however mentioned that there are certain items which are available in 1 or 2 States only but those items are important for that State. **So, such items should not be dropped even if reported from a few markets or 1 State.**

4.8. Expert Group was informed that in respect of Chandigarh, rural markets could not be identified during sample verification exercise, however expenditure for rural sector was reported in HCES 2023-24 data. Guidance of EG was sought on how to deal with the rural weights in absence of rural prices of Chandigarh. **Expert Group recommended to club the rural expenditure of Chandigarh with that of Urban.**

4.9. The Expert Group inquired about how the linking factors would be developed, given the significant differences in classification between the two series. **It was suggested that the PSD team may simultaneously work on formulating linking factors to help ensure maximum comparability between the two series.**

Decision: The Expert Group granted in-principle approval to the proposed process for deriving the weighting diagram. It also recommended that the rural expenditure weights of Chandigarh be incorporated into the urban sector prior to the calculation of the weighting diagram. Additionally, the Group advised PSD to finalize the mapping between HCES and COICOP, and concurrently develop linking factors to facilitate maximum comparability between the two series.

5. House Rent Index Compilation Methodology

5.1. Expert Group members were apprised that the formula used for compilation of House rent index used in the existing series did not provide clarity on month-over-month change in the index. It was also observed if there is any sudden change in the index any particular month, the same gets repeated every 6 month.

5.2. To overcome the above issue, the following formula was proposed to Expert Group after discussion with Dr. Brian Graf, IMF, Mr Laurence Ball of BLS, USA and Dr. Prachi Mishra, member of ehe Expert Group for Base Revision of CPI;

$$House\ Rent\ Index = \sqrt[6]{Rent\ relative} \times Index\ of\ previous\ month$$

5.3. The month-over-month change calculated using the revised formula was presented to the Expert Group and **they agreed to the revise the formula for upcoming series**, with a recommendation that the changes in methodology—and the implications for comparability between the old and new methods should be clearly communicated to the users, after the release of new CPI series, to avoid any confusion.

Decision: Expert Group agreed to the changes suggested by the PSD and suggested to use the formula as

$$House\ Rent\ Index = \sqrt[6]{Rent\ relative} \times Index\ of\ previous\ month$$

Instead of

$$House\ Rent\ Index = Rent\ relative \times Index\ of\ six\ month\ ago$$

6. Consumer Price Index compilation methodology

6.1. The existing approach of compiling Consumer Price Index was shown to the Expert Group. Expert Group was apprised that while interacting with Officials of other countries in IMF it was learnt that most of the countries have adopted short index formula based on chain

index method instead of long index formula currently in use. The formula for short index has been derived from the following steps-

$$I_t = \prod \left(\frac{p_t^i}{p_0^i}\right)^{\frac{1}{n}} \times 100$$

$$I_t = \prod \left(\frac{p_{t-1}^i}{p_0^i} \times \frac{p_t^i}{p_{t-1}^i}\right)^{\frac{1}{n}} \times 100$$

$$I_t = \prod \left(\frac{p_t^i}{p_{t-1}^i}\right)^{\frac{1}{n}} \times I_{t-1}$$

$$I_t = \prod \left(\frac{p_t^i}{p_{t-1}^i}\right)^{\frac{1}{n}} \times Index\ of\ previous\ month$$

Where $\frac{p_t^i}{p_{t-1}^i}$ is the Price Relative with respect to the previous month.

2The short index formula is more suitable as it removes the reliance on base prices when compiling indices, thereby eliminating the need for quality adjustments related to changes in item specifications or shop. **Expert Group agreed to the proposed formula for compilation of indices in the new series.**

6.2. **Treatment in case of shop/ specification change**

6.2.1. If the new compilation methodology i.e. use of short index formula is adopted, in case of shop/ specification change, Quality adjustment would not be required as base prices would no longer be used for index compilation. During the specification change, prices for both old and new specifications are ideally required for the overlapping period. If unavailable, the old specification's price will be imputed in the first month. From the second month, once two months of new specification prices are available, they will be used for index compilation. In practice, due to quality concerns in collecting retrospective prices, imputation will be applied in the first month—except for house rent. **Expert Group recommended to adopt the proposed methodology in the new CPI series.**

6.3. **Imputation of Missing Prices-** In the 6th EG meeting, it was decided to use base price for imputation from second month onwards. However, for the revised method of index compilation it was proposed to use last month's price for imputation for all the items (including seasonal items). The imputed price will be used for imputation in the next month and so on till the actual reporting of prices are done. **Expert Group agreed to the same.**

6.4. **Compilation of higher level indices**

6.4.1. In the 9th EG meeting, weighted Carli method was recommended for imputation of missing index.

6.4.2. Expert Group was informed that IMF recommended the imputation factor to be calculated as the ratio of the higher-level indices of the current month to that of the previous

month calculated by excluding the missing items with no weight re-distribution unlike the weighted Carli method. This method is also called Dutot method. Expert Group was further apprised that the Dutot method is preferred over the Carli, as it satisfies key index number properties such as time reversal and proportionality, which the Carli does not. The Carli method also has a tendency to overstate inflation. **Expert Group agreed to the proposed Dutot method emphasizing that the imputed index should be published with a clear note indicating that it is an imputed value.**

Decision: The Expert Group approved the adoption of the short index formula based on the chain index method for CPI compilation, citing its advantage in eliminating dependency on base prices and reducing the need for quality adjustments. It also endorsed the proposed treatment for shop/specification changes, where overlapping prices or imputation would be used without requiring quality adjustments. For missing prices, the Group agreed to use the previous month's price for imputation across all items, replacing the earlier base price approach. Additionally, the Group approved the shift from the weighted Carli method to the Dutot method for compiling higher-level indices, highlighting its statistical robustness and alignment with international best practices, while recommending that imputed indices be clearly flagged in official releases.

7. Treatment of free PDS items

7.1. Expert Group was apprised that during meetings with Officials of World Bank and IMF in different forums, threadbare discussions were held for the inclusion of free social transfers in CPI. In view of large scale implementation of the free food distribution under Pradhan Mantri Garib Kalyan Yojana (PMGKAY), international experts were of the view to consider it appropriately in Indian CPI. The distribution of rice consumption (in terms of quantity)—free of cost, at subsidized rates, and at open market prices—was presented to the Expert Group to highlight the significance of free consumption and make them aware of its volume.

7.2. A discussion was held on the topic of free social transfers, during which EG recommended conducting research on the volume of such transfers distributed in other countries and whether these countries incorporate these social transfers in CPI compilation.

7.3. Four methods were proposed to incorporate free social transfers in CPI compilation. Due to paucity of time, members of the Expert Group were requested to go through the methods as mentioned in the agenda and share their comments, which may again be discussed in the next meeting of the Expert Group.

8. The summary of the recommendations of EG in this meeting is presented below:-

1. Expert Group approved the process of deriving the weighting diagram using HCES 2023–24 data.
2. Agreed to deletion of items with imputed expenditure (Cooked meals received free) and illegal items (Ganja) before weight derivation.
3. Approved the imputation of weights to similar items and pro-rata redistribution for items not included in the CPI priced list.
4. Endorsed the new five-fold criteria for item basket formation.
5. Approved the item basket derived using the new criteria, which showed better state-wise retention compared to the previous four-fold criteria.

6. Recommended not to drop state-specific items even if reported from fewer markets or only one state.
7. Approved clubbing rural expenditure of Chandigarh with the urban sector due to revised notification of Chandigarh administration and lack of markets/price data in rural areas.
8. Recommended for finalizing the HCES-COICOP 2018 mapping.
9. Instructed PSD to simultaneously work on developing linking factors for comparability with the current CPI series.
10. Approved the revised formula for House Rent Index:

$$House\ Rent\ Index = \sqrt[6]{Rent\ relative} \times Index\ of\ previous\ month$$

In place of

$$House\ Rent\ Index = Rent\ relative \times Index\ of\ six\ month\ ago$$

11. Recommended clear communication to the data users on change in methodology to avoid any confusion.
12. Approved adoption of the short index formula based on the chain index method for monthly CPI compilation.
13. Endorsed the approach to handle shop/specification changes using overlapping prices or imputation, eliminating the requirement of base price updations.
14. Agreed to use the previous month's price for imputing missing prices for all items, including seasonal ones.
15. Approved replacing the weighted Carli method with the Dutot method for compiling higher-level indices.
16. Recommended conducting research on global practices regarding inclusion of such transfers.
17. Deferred decision on the four proposed methods for incorporating free transfers in CPI; members to review and share comments to PSD before the next meeting.

9. The meeting ended with the vote of thanks to the Chair.

*****

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. Sanjay, ADG, PSD, NSO, MoSPI
3. Shri Anujit Mitra, Adviser-in-Charge, DSIM, RBI
4. Dr. Anupam Prakash, Adviser-in-Charge, Monetary Policy Department, RBI
5. Mr. Dilip kumar Sinha, DDG, DPIIT, Ministry of Commerce and Industry
6. Dr. Himanshu, Professor, CESP, SSS, JNU
7. Dr. Prachi Mishra, Professor, Department of Economics, Director and Head, Ashoka Isaac Center for Public Policy, Ashoka University.
8. Shri Sanket Mohapatra, Professor, IIMA
9. Mr. Renjith Mohan, Manager, RBI
10. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI

Other Participants:

10. Shri N. K. Santoshi, Director General (Central Statistics), MoSPI
11. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
12. Mr. Ram Sajeevan, Director, PSD, NSO, MoSPI
13. Mr. Sanjeev Kumar, Deputy Secretary, PSD, NSO, MoSPI
14. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
15. Mr. Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
16. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
17. Ms. Poonam Singh Chauhan, Assistant Director, PSD, NSO, MoSPI

S-11015/4/2022-PSD-Part(4)

Government of India
Ministry of Statistics and Programme Implementation
National Statistics Office
Price Statistics Division

Khurshid Lal Bhawan, New Delhi
Date: 09/09/2025

Subject: Minutes of the eleventh meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The eleventh meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 14th August, 2025 in Room no. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**. Secretary, MoSPI and Director General (Central Statistics), MoSPI also joined the meeting for some time.

2. At the outset, the Chairman welcomed all members of the Committee, along with Dr. Brian Graf , Senior Economist, from the International Monetary Fund (IMF), Head Quarter, Washington, USA and Ms. T. Rajeshwari from IMF SARTTAC, Delhi to the 11th meeting of the Expert Group. Thereafter, the Deputy Director General (DDG), Price Statistics Division (PSD), briefed the Committee on the Technical Assistance Mission on the Consumer Price Index (CPI) conducted by the IMF and formally introduced Dr. Brian Graf to the members. The discussion focused on methodologies and proposed changes in the upcoming CPI series, covering the following key areas:

1. Implementation of COICOP 2018
2. Revision of the Weighing Diagram
3. CPI Compilation Methodology including House rent
4. Treatment of Free Distribution under the Public Distribution System (PDS) in CPI Compilation
5. Data Dissemination Practices
6. Price Collection Procedures including Airfare, Rail fare, Gold, Silver

Thereafter, Dr. Brian Graf, IMF expert expressed that overall, the proposed concepts and methods that would be used to compile the updated CPI largely reflected the standards and best practice as defined in the 2020 CPI Manual; however, there was scope for improvement.

Further, he presented the summary of recommendations and observations to the members of the Expert Group;

3.1 **Recommendation 1**- *Discontinue the use of "base period" as the term has no meaning in the context of the CPI. Instead, define each of the reference periods – index reference period, weight reference period, and price reference period.*

- Index reference – period that the index equals 100. Should be annual. For the updated CPI, 2024=100
- Weight reference – period during which the expenditure data used to compile the weights had been collected. For the new CPI series, the weight reference period = 2023-2024.
- Price reference – period during with the prices used to calculate the reference prices were collected. Should be an annual average. The price reference for the new CPI series = 2024.

The committee noted the suggestions made by Dr. Brian.

3.2 **Recommendation 2**- *It is not necessary to identify and use reserve shops. While these are serving as a shadow sample, if a sampled variety is permanently missing within a sampled outlet, it is not necessary to replace the outlet. The data collector should identify a replacement variety within the sampled outlet. If an outlet closes, then it should be replaced.*

The suggestions were noted, with emphasis on the prevailing international practice of selecting the most popular shop as the primary outlet, followed by the identification of the most popular varieties within that shop, which India is also following. In instances of non-availability, whether of the shop or the item, it was underscored that the replacement should also be guided by the most popular criteria applicable at that time. It was further observed that the reserve shop identified during the initial market survey may no longer represent the most popular choice. Accordingly, the Committee recommended that the principle of selecting the most popular shop or item be consistently applied whenever a replacement or specification is required, and that appropriate instructions be issued to field offices to ensure uniform implementation. The practice of mapping reserve shops in CPI may be discontinued.

3.3 **Recommendation 3**- *All missing prices should be imputed using the short-term relative change in the prices of other available varieties. If all varieties are missing, the next level up in aggregation is used as the basis for making the imputation.*

- *Seasonal items – Seasonal items are imputed in each month that the item is missing.*
- *Non-seasonal items – For non-seasonal items, prices can be missing for up to a defined threshold. For example, most countries use 3 months. If the variety is missing in M1, it is imputed, if it is again missing in M2, the price is imputed; however, if the variety is still missing in M3, the data collector selects a replacement variety, develops a detailed specification, and collects the price.*
- *Items missing within a state index, can be imputed using the prices of other items within that state. This ensures that the imputation reflects price change within that state and is not influenced by higher rates of change in other states.*

The EG members acknowledged the recommendation. The same procedure has also already been adopted for implementation in the upcoming series.

3.4. **Recommendation 4**- *When developing the weights, weights should be developed within the states first. Each state should have a unique basket and weighting structure. The national level weights are an aggregation of the state weights. At the national level, all items that have been selected in the individual states will be included; however, within each state, will have a unique basket that reflects expenditure within that state. The basket at the state level is not a replicate of the national level weighting structure because there are items that don't exist in a given state. This is what has been done for the updated CPI and reflects international standards.*

The EG members acknowledged the recommendation. The procedure has already been applied in the current series and been advised for implementation in the upcoming series too.

3.5 **Recommendation 5-** *The NSO selects the variety sample within the sample outlets using the most popular variety as the basis for selection. This method is the most commonly used for selecting varieties for pricing and should be continued.*

- *When using this method to select the variety sample, it is important to periodically (every 12 months, 18 months, or 24 months) confirm that the selected variety remains the most popular. If it is confirmed that a different variety is now more popular, data collectors should select that variety for pricing going forward. The detailed specification is developed and a price is collected. If the respondent confirms that the variety continues to be the most popular, then no changes or replacements are needed.*

The suggestion was noted. EG advised PSD to issue necessary instructions to the field offices to periodically confirm to ensure capturing of the prices of the most popular variety of the item in CPI.

3.6**Recommendation 6**- *Illegal items are generally excluded from the index. While conceptually, illegal items represent consumption expenditure, in practical terms it is difficult to develop reliable weights and collect the prices of illegal items. In the case of ganja, it was presented that use of ganja up to a certain limit was not considered illegal. Expenditure was reported in the expenditure survey on ganja. It was proposed that the expenditure on this item is re-distributed to other items with in the Division.*

It was also suggested that Ganja may be clubbed with "other intoxicants" to have combined weight. The suggestion was noted and EG suggested re-distribution of the expenditure on Ganja to other items of the group for deriving weights for the new series.

3.7 **Recommendation 7**- *Taxes, such as property taxes, road taxes, are considered out of scope of the CPI because they don't represent consumption expenditure and should be removed.*

EG members were apprised that there is only one such item in HCES i.e. 'Other Consumers taxes and cesses' (Code- 899), which covers road taxes, property taxes etc. This would be removed.

3.8 **Recommendation 8**- *Core inflation – The NSO provides data to the Reserve Bank of India (RBI) for purposes of calculating core inflation. The NSO should continue to provide the RBI with the data needed to compile core inflation estimates. Calculation and dissemination of core inflation should not be done by the NSO because it would create issues if the NSO calculation of core inflation differs from the RBI. Also, average users do not understand this issue of core inflation and it could impact credibility.*

The suggestion was noted by the committee.

3.9 **Recommendation 9**- *Headline indexes should fully reflect the full extent of price change. While a small number of countries seasonally adjust their monthly CPI series, these indexes are analytical only. It is not recommended that the NSO compile and disseminate a seasonally adjusted CPI series.*

The suggestion was noted.

3.10 **Recommendation 10**- *The NSO should not produce, even for internal purposes, inflation projections. No statistical office produces inflation projections. They give the data needed by the Ministry of Finance or central bank to compile projections for their use. Even*

if used internally only, the compilation of inflation forecasts can undermine confidence in the CPI. If the disseminated CPI is at or near the projection, the assumption would be that the data were adjusted to fit the projection. Alternatively, if the projection is significantly different than the actual headline index, this can impact credibility because it could raise questions about the reliability of the CPI.

The suggestion was agreed upon by the EG members and noted.

3.11 **Recommendation 11-**

- *Airfare – when collecting airfare it is important to include not only domestic travel, but also international travel. The airline is a price determining characteristic and should be part of the specification. The specification should also include a greater variety in terms of timing (14 days advance purchase, 21 days advance purchase) and not restricted to 7 days advance purchase.*
- *For rail fares, the current practice is to collect prices from websites and directly from the railway station window. Because the websites and railway station windows charge service fees that change frequently, this has created a problem because changes in these service fees should not be reflected as price change in the railway index. With the new CPI, fare data will be collected and provided by the IRCTC. This will provide a more meaningful measure of price change for transportation by rail.*

The committee agreed with the proposed recommendations and advised incorporating international direct routes into the price collection framework for the upcoming CPI series. Further, it supported the approach of identifying specific airlines for price collection, rather than selecting the lowest available fare across airlines within a given time slot. EG also recommended to shifting to 21 or more days advance purchase for collecting airfare.

3.12. **Recommendation 12-** *Jewellery – it is not appropriate to price gold and silver in the CPI. These are investment items and are out of scope of the CPI. The issue with compiling an index for gold and silver jewelry is the level of customization which makes it difficult to follow the price of an item across time. Many countries take the approach of defining jewelry items that will be available across time and do not try to price the more custom pieces. Collect the prices of basic, simple gold and silver bangles, necklaces, and rings.*

The Committee considered the recommendation regarding the treatment of jewellery in the Consumer Price Index (CPI). It was noted that gold and silver, being investment items, are not appropriate for direct pricing within the CPI and are therefore out of scope. The Committee also recognized the challenges in compiling an index for jewellery due to the high level of customization, which makes it difficult to track identical items over time.

In line with international practice, the Committee recommended to adopt the approach of defining standard jewellery items that are likely to be available consistently in the market, rather than attempting to price customized pieces. Accordingly, it was approved to collect

prices of basic and simple gold and silver jewellery such as bangles, necklaces, and rings for inclusion in the updated CPI.

3.13 **Recommendation 13-** *Rent index – with the panel approach, the larger sample of rental units is divided into panels that are each broadly representative of the whole. Data are collected for panel 1 in M1, panel 2 in M2, … panel 6 in M6. When calculating price change, the price change is based on a comparison of like with like, meaning that panel 1 in M7 is compared with the prices collected in M1. This results in a six-month change. To convert the 6 month change into a one month change, the 6th root of the change is calculated. This is then multiplied by the previous period index. Prices for the other panels are not imputed or used. Only the prices of the individual panel are used. There will be need for the NSO to review the sample of rental units within each state and augment as needed. Sample augmentation can be done over the coming months.*

The recommendation regarding the panel approach for the Rent Index was discussed thoroughly. The Committee noted that while the panel method is conceptually sound, its implementation in the Indian context presents significant challenges. In particular, increasing the sample size to create multiple panels is not practically feasible in rural areas, as many villages may not have a sufficient number of rented dwellings to support six panels.

In view of these limitations, and to ensure robustness of the Rent Index, it was agreed that rent data should be collected every month using the complete sample in both rural and urban areas, rather than dividing the sample into panels. This approach will avoid complications associated with small sample sizes and ensure that adequate data are consistently available for compilation.

It was also suggested that while collecting the rent, a question may be asked from the household residing in the selected dwellings, whether any change in monthly rent is expected in future and if so the month from which increase/decrease is expected may be recorded to avoid frequent visits to the household.

Accordingly, the Expert Group recommended adopting full sample for the compilation of the House Rent Index. While considering the operational feasibility in data collection in India , PSD may design a suitable method to collect monthly rent data from the field.

3.14 **Recommendation 14**- *Add a question to the expenditure survey to ask households to identify the type of outlet where expenditure is made (online, supermarket, local shops, specialized shops, etc). This will ensure more representative outlet and price collection samples.*

The suggestion was noted for further communication to the Household Survey Division for consideration.

3.15 **Recommendation 15-** *COICOP 2018 – The NSO should implement COCIOP 2018 in the new index. COICOP 2018 is the international standard classification and aggregation*

structure for CPIs. Some of the terminology used to describe the different Divisions, Groups, Classes, and Sub-classes doesn't necessarily reflect the Indian experience. Many countries adapt the language and terminology to fit their national circumstances. It is important to maintain the basic structure, but terminology can be adapted. If a Division, Group, Class, or Sub-class is not relevant and does not have an expenditure value, it can be skipped. For example, COCIOP 2018 has 13 Divisions, one of which, Div 12, is Financial and Insurance Services. India does not have a weight for this Division and so for publication purposes, Div 1-11 and Div 13 will be published. There will be a footnote to explain that Div 12 does not have weight, so it has been excluded.

The suggestion was noted. The Committee deliberated on the proposal to adopt **COICOP 2018 (Classification of Individual Consumption According to Purpose)** as the framework for the new CPI index. The following points were noted:

- COICOP 2018 provides the internationally accepted standard classification and aggregation structure for CPIs.
- Adoption of this framework will ensure comparability of India's CPI with global practices.
- While maintaining the overall structure of COICOP 2018, some terminology at the Division, Group, Class, and Sub-class levels may be changed to better reflect the Indian consumption behaviour.
- Many countries follow this practice—adjusting nomenclature to suit their national context without disturbing the underlying coding or structure.
- Where a Division, Group, Class, or Sub-class is not relevant for India and has no expenditure weight, it may be excluded from publication. For example, **Division 12 (Financial and Insurance Services)** does not have a weight in India's CPI. Accordingly, Divisions 1–11 and Division 13 will be published, with a footnote clarifying that Division 12 has been excluded.

The committee reaffirmed the importance of adopting COICOP 2018 to ensure harmonization across statistical domains. It was noted that **Household Consumption Expenditure Survey (HCES)**, **sub-state CPIs**, and the **National Accounts Statistics (NAS)** were expected to align with COICOP 2018 in future revisions. A unified

classification system would enhance consistency, comparability, and integration across national statistical outputs.

While COICOP 2018 provides a robust structural framework, members emphasized the need to adapt certain terminologies and presentation formats to better reflect Indian consumption realities. It was agreed that **terminological flexibility was permissible**, provided the core classification codes, structure and hierarchy were preserved.

A member noted that adopting COICOP strictly "as is" may not always reflect Indian consumption patterns. In particular, it was highlighted that **milk and eggs have been grouped in the same Class under COICOP 2018**, which did not align with Indian consumption traditions and dietary habits. It was informed that in existing CPI series at the same level, these were separately classified and combining such items in revised series may not be appropriate. Similar might be the situation in some other cases also. It was further suggested that, for the Indian CPI, the divisions be classified into 16 groups instead of the 12 currently prescribed.

The Committee acknowledged this concern but emphasized that **COICOP is a UN standard classification**, designed for international comparability. As such, some country-specific consumption distinctions may not always be reflected.

From a broader perspective, India, being a major economy, should align with COICOP 2018 to ensure consistency not only internationally but also across national surveys and statistics. If CPI were to adopt a different classification, it would create challenges for alignment with **HCES, NAS, sectoral CPIs, and state-level CPIs**. Therefore, EG recommended that while the overall structure of COICOP 2018 should be retained, **necessary adaptations in terminology and descriptive labels might be introduced** to better reflect Indian consumption realities without disturbing comparability.

3.16 **Recommendation 16-** *In the current expenditure survey, there are a number of items that are grouped together that should be separated to implement COICOP. Different methods for splitting the expenditure were discussed, including the ranking method. These methods can be used to split out expenditure for items that are grouped together.*

The suggestion was duly noted and recommended for implementation wherever deemed necessary, utilizing available information from the HCES dataset or other relevant administrative data sources.

3.17 **Recommendation 17**- *The NSO will implement the short-term, or modified, formula for the calculation of the CPI. With the short-term, modified, formula, long term price change is calculated by chaining together short-term price changes. Mathematically, the long-term and short-term formulas are identical and yield the same results. The short-term formula is far more flexible, allowing for replacement of outlets, varieties, and sample augmentations. This represents a significant improvement over current index calculation methods and more fully reflects international standards and best practices.*

The suggestion was duly noted. Recognizing the significance and practical value of employing the short index, the committee already recommended to incorporate its use in the forthcoming CPI series.

3.18 **Recommendation 18**- *PDS – in general, an index used for monetary policy and as a general macroeconomic measure of inflation should exclude items provided to households free because when this is done, it distorts the weights. This is not the case for the proposal to include PDS in the CPI. The weights reflect only expenditure as reported by households and no imputations have been made for the PDS or other items that are free. The challenge for the NSO is that the PDS program has a significant impact on the prices paid for rice and wheat in India. The PDS program represents an exception to the general rule regarding items provided free of charge to households. The CPI staff presented their proposal for the treatment of PDS in the CPI. The method demonstrated does not mute price changes for rice and wheat and would fully reflect price change should a nominal prices be introduced for the PDS products. The methodology does not overstate or distort price changes, which is important.*

The Committee deliberated on the treatment of items distributed under the Public Distribution System (PDS) in the Consumer Price Index (CPI).

Some members expressed concerns regarding the inclusion of items provided free of charge in the CPI, noting that this practice may not be consistent with the guidelines outlined in the IMF Manual, which generally excludes free items from household consumption expenditure to avoid distortion of weights. Further the same treatment is not followed in the case of health and education and other social securities.

It was clarified that in the proposed methodology (as mentioned at **Annexure-II**), no imputations have been made for PDS or other free items. The weights are derived strictly from reported household expenditures.

The PSD team explained that the PDS program has a significant influence on the effective prices paid for rice, wheat and other PDS items in India, making it an important exception to the general principle of excluding free items. The team further demonstrated that the proposed approach does not mute price changes for rice and wheat. Instead, it ensures that any future introduction of nominal prices for PDS products would be fully reflected in the index.

It was emphasized that the methodology neither overstates nor distorts price movements, thereby preserving the accuracy of the CPI as a measure of inflation and as an input for monetary policy. PSD team also asserted that non-inclusion of PDS prices in CPI calculation may lead to making the updated series less robust and resilient as in that case the appropriate changes in CPI will not be reflected when there is any change in Government policy regarding free distribution of rice, wheat and other PDS items in future in the life of the series.

Dr. Brian noted that since the Household Consumption Expenditure Survey (HCES) already captures **own production**, by the same logic, the PDS should also be incorporated into the CPI. This would allow the index to adequately reflect potential future price fluctuations. He further pointed out that in India, the central bank has also recommended the inclusion of PDS items in the CPI.

The Committee agreed to incorporate free PDS items in the upcoming CPI series as per proposed methodology to combine PDS, Free and market price items to compile combined Indices for such items. It was also recommended that the proposed changes be clearly presented in the public domain, with adequate explanation, to spread awareness and to invite suggestions well in advance of the release of the new series.

3.19. **Recommendation 19**- *The implementation of alternative data sources should be done with care using a phased approach. The NSO struggles with obtaining access to scanner, or transactions, data. In the medium-term, the NSO should continue to seek access to scanner data; however, initially, retailers should be asked to provide data on the sampled varieties collected within the outlet. When using this approach, CPI staff can begin to more fully understand the data and how it can be used. Also, with this first phase, the traditional CPI calculation methods can be used.*

-

- *A new expenditure survey will be conducted in 2027-2028 and these data will be used to update the CPI. The implementation of scanner data, assuming access to the data, can be done on a broader scale as part of this next update.*
- *While a number of NSO in other countries use scanner data in their CPI, it is not without issues. The implementation of scanner data continues to evolve and is not entirely a settled issue.*

The suggestion was noted.

3.20 **Recommendation 20**- *Web scraping – with web scraping, it is important to understand whether the prices online reflect actual transaction prices. Also, recent research has shown that web scraping can introduce volatility in the CPI. The growing consensus is that more data is not necessary better data. Web scraping is commonly used for airlines and hotels.*

The suggestion was noted.

3.21 **Recommendation 21-** *The new CPI should be linked with the old series to create a continuous time series of data. Different methods are possible, which were discussed. The main challenge will be the implementation of COICOP 2018. Most countries that have implemented COICOP 2018 simply link what can be linked. If it can't be linked, it is labelled either as a new index or a discontinued index. In general, the headline index, divisions, and most groups can be linked; however, at a more detailed level it becomes problematic. The NSO should link what can be linked only.*

The suggestion was noted and the committee also recommended generating back series only at level which can be linked.

3.22. **Recommendation 22-** *The NSO should begin an outreach program to introduce the new CPI. It is important to announce the dissemination of the new index well in advance and to describe for users the planned changes to be implemented. This includes a short summary of changes to methods and calculation as well as explaining changes in the weighting structure. This summary should be posted on the NSO website. Additionally, outreach seminars should be conducted to different user groups to explain planned changes and to respond to user questions. The outreach effort should begin immediately given plans to introduce the new index in February 2026 (January index).*

The suggestion was noted. The EG was also informed that a detailed outreach plan is under preparation for sensitization of the stakeholders and dissemination of the series. The exercise is being done in collaboration with the Media and Publicity Unit of MoSPI.

3.23 **Recommendation 23-** *Given the nature of the Indian statistical system and frequent staff turnover, consideration should be given to creating a steering committee that would provide continuity and minimize disruption as staff are moved and new staff are assigned.*

The suggestion was noted.

3.24. **Recommendation 24**- *Consideration should also be given to creating a research and methodology group that would focus on key research issues in CPI compilation and facilitate the testing of new methods going forward.*

The suggestion was noted.

3.25. **Recommendation 25**- *With the updated CPI, the NSO will begin releasing detailed indexes at the state level. Given current capacity and resource constraints, it is not possible to consider producing indexes at the sub-state (district) level. To publish CPIs for individual districts would require a significantly larger household expenditure sample, as well as significant expansion of data collection. Such indexes, based on current sample sizes, would be unreliable.*

The suggestion was noted.

4. The meeting ended with the vote of thanks to the Chair.

****

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Shri Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Shri Sanjay, ADG, PSD, NSO, MoSPI
3. Shri Anujit Mitra, Adviser-in-charge, DSIM, RBI
4. Dr. Anupam Prakash, Adviser, Monetary Policy Department, RBI
5. Dr. Himanshu, Professor, CESP, SSS, JNU
6. Dr. Prachi Mishra, Professor, Department of Economics, Director and Head, Ashoka Isaac Center for Public Policy, Ashoka University.
7. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI

International Expert

8. Dr. Brian Graf, Senior Economist, International Monetary Fund(IMF), Washington

Other Participants:

9. Ms. T. Rajeshwari, IMF SARTTAC, Delhi
10. Shri Anil Kumar Sharma, DDG, Labour Bureau, Ministry of Labour and Employment
11. Shri Joice John, Director, RBI
12. Shri Jose Kurian, Director, PSD, NSO, MoSPI
13. Shri Ram Sajeevan, Director, PSD, NSO, MoSPI
14. Shri Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
15. Shri Prasu Jain, Deputy Director, PSD, NSO, MoSPI
16. Ms. Poonam Singh Chauhan, Deputy Director, PSD, NSO, MoSPI
17. Shri Krishan Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
18. Shri Kaushalendra Kumar Mishra, Jr. Statistical Officer, PSD, NSO, MoSPI
19. Shri Amit Kumar Singh, Jr. Statistical Officer, PSD, NSO, MoSPI
20. Ms. Priya, Jr. Statistical Officer, PSD, NSO, MoSPI
21. Ms. Smita Rawat, Sr. Statistical Officer, PSD, NSO, MoSPI
22. Ms. Reva Vijay Rathan, Sr. Statistical Officer, PSD, NSO, MoSPI

*****

S-11015/4/2022-PSD-Part(4)
Government of India
Ministry of Statistics and Programme Implementation (MoSPI)
National Statistics Office
Price Statistics Division

Khurshid Lal Bhawan, New Delhi
Date: 29/12/2025

Subject: Minutes of the 12th meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The 12th meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Ex-Director, UNSIAP and Ex-Director General (CSO) on 19th December 2025 in Room no. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**. Director General (CS), MoSPI also joined the meeting.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

I. Action taken report on decision taken during 11thg EG meeting.

II. COICOP 2018 mapping of HCES items for CPI new series

III. Weighing Diagram using HCES 2023-24 data following new COICOP 2018 classification.

IV Treatment of Prices of Items Sourced from E-commerce Platforms.

V Methodology for compilation of Electricity Price Index

VI Compilation of PDS Index

VII Compilation of House rent Index

VIII Compilation of Petrol, Diesel, LPG, CNG and PNG

IX Compilation of Rail fare Index

X Compilation of Telecom Indices

XII Draft trial index of 2025 based on proposed methodology

XIII Draft template for the technical report of the Expert Group

3. **Action Taken Report on the decisions taken during twelfth EG meeting:**

3.1 EG was apprised about the action taken on recommendation of 11th EG Meeting and IMF TA mission.

3.2 One of the members requested that the committee might consider adopting 2022-23 as base year for weights taken from HCES 2022-23 in place of HCES 2023-24 proposed for use, citing that base revision of other macro-economic indicators in progress have decided to use 2022-23 as base year. It was also suggested that use of HCES 2022-23 in CPI would facilitate synchronization across economic indicators like GDP, WPI and IIP. Other members of the EG said that for any price index, the weight reference period should be as close as possible to the price reference period. The base price data for the revised CPI series was collected during 2024. Further, since HCES 2023-24 results are available, it would be more appropriate to use this for capturing the latest households spending pattern. This would also ensure better alignment between the weight reference period and price reference period and therefore satisfy the requirement of use of modified Laspeyres' method in CPI compilation. Further, it was informed that the base prices were collected in 2024, therefore, even if HCES 2022-23 data was used for determining weights, the CPI would be available from January, 2025 onwards only. Therefore, it was recommended to go ahead with use of HCES 2023-24 for determining item basket and weights of CPI 2024 series. In cases of items where expenditure data for 2023–24 were not available, HCES 2022–23 data may be used.

3.3 EG also recommended that the first press release of the revised CPI series should include a concise summary note highlighting the new data sources used and the major methodological changes introduced in the revised series.

3.4 Other action points emerged from the 11th meeting of EG were presented during the meeting. EG noted the action taken on the earlier recommendations.

4. COICOP 2018 mapping of HCES items for CPI new series

4.1 As decided in the 11th meeting of the EG, PSD completed the mapping of HCES 2023–24 items to the COICOP 2018 classification structure and same was presented in the meeting.

4.2 EG was apprised that for most of the items, direct one-to-one mapping between HCES and COICOP 2018 classifications was feasible, and such items have been mapped directly. However, in a few cases, direct mapping was not possible, as HCES was not originally designed in accordance with the COICOP 2018 classification framework. In such instances, PSD has adopted an approach of either clubbing related items or segregated the items to arrive at a meaningful and conceptually consistent mapping with COICOP 2018.

4.3 EG was apprised that during this mapping exercise, it was ensured that there was no alteration in the structure of COICOP 2018, except for items relating to "pan". As per the COICOP 2018 classification, "betel leaves" are to be mapped under "Group 02.4: Narcotics", specifically under "Class 02.4.0" and subclass "02.4.0.0". Betel leaves ("Paan") has now been mapped under the "Group 02.3 (Tobacco)", under Class "02.3.0 (Tobacco products)" and "subclass 02.3.0.9 (Other tobacco products)". Further, the names of some headings have been modified to align with Indian naming conventions.

4.4 The Chairperson observed that while clarity in item description is important, any further refinement of labels in specific divisions may be taken up separately, without altering the approved structure.

Decision - The Expert Group approved the proposed CPI 2024 structure as per COICOP 2018, with the correction of 'PAN' to 'PAAN', and agreed that other naming refinements may be examined independently, if required.

5. Weighing Diagram using HCES 2023-24 data following new COICOP 2018 classification:

5.1 EG was apprised about the weighing diagram using HCES 2023-24 data following new COCIOP 2018 classification and the steps involved in preparation of weighing diagram.

5.2 It was informed that for PDS, expenditure of coarse grains was collected from 15 States. Out of these 15 States, expenditure on individual coarse grain items was collected from 10 States. For the remaining 5 States, expenditure of individual coarse grain items was calculated from the expenditure of coarse grains in the ratio of the expenditure of individual coarse grain items using the production data for those states. In case of item "Coarse grain" (i.e. other than PDS), the methodology using both expenditure and production data as given at point 3.1(c) of the agenda was adopted.

Since Ganja is illegal in India, expenditure of Item Ganja was re-distributed in the Division- Pan, tobacco and other intoxicants for every state and sector.

5.3 For certain items, direct mapping to COICOP 2018 was not feasible. For instance, in the case of clothing items, HCES does not distinguish between male and female categories, whereas COICOP 2018 provides separate classifications. In such cases, the proportions of male, female, and children (wherever applicable) were derived using Census 2011 population data.

5.4 Similarly, for tuition fees, the enrolment ratios for primary, secondary, and higher education were used to distribute the consolidated 'tuition fee' item into three corresponding categories. To get the ratio of primary, secondary and higher education, enrolment data from UDISE was taken for primary and secondary and enrolment data for higher education was taken from AISHE for the year 2021-22, as the latest results of AISHE was released for the year 2021-22 only.

5.5 Further, some HCES items represented a combination of multiple services, such as 'watchmen/security guard and driver', which fall under different classifications in COICOP 2018. Accordingly, such HCES items were bifurcated in equal proportions, as decided by PSD, to enable the creation of multiple weighted items from a single HCES item. In addition, certain HCES items were clubbed together to form a single weighted item, wherever appropriate.

5.6 With regard to selection of items for the weighing diagram, the Expert Group directed that in view of use of latest technology platforms with better computing power, there is no need to apply any criteria to exclude any item from the CPI basket. The earlier recommended five-fold criteria for preparation of weighing diagram should be ignored now. Items should be selected as per the COICOP 2018 classification and availability of base price data. It was clarified that items should be excluded from the weighing diagram only in cases where base price data is not available, and not based on low expenditure shares.

Decision: EG approved the proposed weighing diagram structure according to COICOP 2018 classification. The Expert Group discussed the issue of compilation of back series and was of the view that, to the extent possible, the same classification as adopted in the revised CPI series should be used for the back series, separately for rural and urban sectors. However, more deliberations are required for the preparation of back series.

6. **Treatment of Prices of Items Sourced from E-commerce Platforms:**

6.1 EG was apprised that prices from e-commerce platforms are collected on a weekly basis. A monthly average price using these weekly transaction price observations would be compiled. The resulting average monthly price shall be used for the calculation of price

relatives and shall be integrated with the market price data of the corresponding States under the Urban sector as an additional market for further index computation.

6.2 EG was apprised that in case of items to be sourced from e-commerce platforms; the special codes are applicable like physical shops. These codes are "0" for no change, "1" for change in e-commerce platform/website, "2" for change in specification of the item and "3" where both website and specification are changed. Further, where no Special Codes are reported, the monthly price shall be compiled as the simple average of available non-zero weekly prices, ignoring missing weeks, with the Special Code remaining zero and item specifications unchanged.

Where any weekly observation carries a Special Code, the monthly price shall be compiled as the average of the available non-zero weekly prices for the new specification, without imputation, and the applicable Special Code and specification shall be retained.

Where no valid weekly prices are available for the month, the latest non-zero weekly price of the previous month shall be imputed using an appropriate open-market factor, with the Special Code set to zero.

6.3 The treatment of discounts was discussed, and it was clarified that the same price and market methodology as in the existing series would be followed. Individual discounts would not be considered; however, discounts available uniformly to all consumers would be captured as the retail price.

Decision: EG approved the proposed methodology on the treatment **of prices of items sourced from E-commerce Platforms.**

7. Compilation of PDS Index:

7.1 A detailed discussion was held on the treatment of free Public Distribution System (PDS) items and other transfers in the revised CPI series. The Expert Group was informed about the comments received on the discussion paper published by the Ministry on treatment of free items in CPI. Further, an analysis on the non-food items as captured in HCES 2023-24 and Government expenditure on education and health as per National Accounts Statistics (NAS) 2023-24 was also presented.7.2 Members noted that a significant proportion of comments emphasized that CPI is primarily used for macro-economic and monetary policy purposes and therefore should measure prices actually paid by consumers. Therefore, it was argued that the items supplied free of

charge were in the nature of transfers rather than items purchased by the household and do not conceptually belong to the item basket for compilation of CPI.

7.3 It was also suggested by some stakeholders that a new index which includes for all these welfare measures taken by the government or Civil Society Organizations should be compiled and published.

7.5 Some members said that that the consumption of free supply of items by the government is similar to consumption of home-produced food grains and owner-occupied dwellings. It was clarified that these were conceptually different from free supply of food grains, as they relate to own consumption or ownership rather than transfers from the government.

7.6 Members also argued that the Government incurs significant expenditure on education and health services for citizens; however, such expenditures are not proposed to be considered in the compilation of CPI. Internationally as well, several governments including Brazil distribute food items free of cost to the population, yet these are not included in CPI compilation. Further, in many countries, education and health services are provided free to citizens, but the same are not reflected in their CPI basket.

7.7 Based on these observations, most of the members were not in favour of including free items in the CPI basket. It was also argued that when items were distributed free of cost, their impact would naturally get reflected in the prices of those items in the open market. Consequently, the effect of such free distribution is automatically captured in the CPI through market prices.

7.8. Accordingly, the Committee recommended adopting the methodology outlined under Case 2 of the agenda item 6 for implementation of the new CPI series for PDS items, and further recommended including PDS items as weighted items in the CPI basket. The Committee also recommended that items should be considered for index compilation only where both the base price and corresponding weights were available. Further, the committee agreed that in case of PDS items where a positive price becomes zero in future due to free distribution, the price should be imputed.

7.9 For imputation, the Committee suggested that if a price is missing in a particular PDS category (for example, BPL), it should be imputed using the month-on-month price movements observed in other available categories. If prices are missing across all categories, given the administrative nature of PDS items, the price should be carried forward from the previous month. The same imputation method has been suggested to be implemented in the CPI 2024 for all the items provided on administered prices like,

PDS or charges determined by the departmental undertakings or public sector corporations like Electricity charges, Rail fare etc.

Decision: The EG members emphasized that the revised CPI series should avoid conceptual controversies and should adhere to consistent international principles. After detailed deliberations, the Expert Group decided that free PDS items shall not be included in the CPI 2024 series. This should be specifically informed to the users. About development of "welfare adjusted CPI", it was advised to have detailed and careful deliberations on the topic after the release of CPI 2024.

The Committee also recommended that the prices should be imputed when an item's price becomes zero due to free distribution using price movements observed in other relevant categories for such imputation. In cases where prices were missing across all categories for an item supplied at administered prices, the price from the previous month may be carried forward as the imputed price.

8. Methodology for Compilation of Electricity Price Index:

8.1 The methodology for the compilation of the Electricity Price Index was discussed in detail. It was explained that, instead of collecting only per-unit tariff rates, total electricity bill amounts corresponding to specified consumption slabs—such as 100 units, 200 units, and 300 units—would be captured.

8.2 The effective unit price for each slab would be computed by dividing the total bill amount by the units consumed, inclusive of fixed charges and meter charges. A weighted average of the effective unit prices across slabs would then be used to derive a single representative price for each DISCOM.

8.3 The Committee suggested that in cases where electricity is provided free of cost up to a specified slab and the corresponding base price is zero, such slabs shall not be included in the computation, consistent with the decision taken while considering the compilation of PDS items. However, if in future the price of any slab becomes zero, the price for that slab shall be imputed based on the price movements of the other slabs within the State. Further, if all slabs become free, the price of the previous month may be carried forward as the imputed price, since electricity was an item supplied at administered prices by the DISCOMs and imputation based on other market price items may not be appropriate in such cases.

8.4 EG members observed that if all slabs were to become free in a State, the index would become non-computable for that State. To address this issue, the Expert Group

recommended the inclusion of an additional slab—such as electricity consumption up to 400 units to ensure computability of the index, noting that the CEA also provided data on the number of domestic users in slabs above 300 units.

8.5 The Committee noted that the proposed methodology for compilation of the Electricity Price Index has been formulated keeping in view the presence of free slabs in some States. Accordingly, the Committee suggested revisiting the methodology, if required, to incorporate any necessary modifications.

Decision: The EG recommended that slabs of electricity consumption for which electricity was being provided free of cost to domestic consumers should not be considered for CPI compilation and in future if any of the slabs become free then the same may be imputed based on the price movements of the other slabs within the State. Further, if all slabs become free, the price of the previous month may be carried forward as the imputed price, since electricity was an item which would be supplied on prices fixed by DISCOMs and imputation based on other market items may not be appropriate.It was also recommended to introduce one additional slab—electricity consumption up to 400 units—for all DISCOMs across all States, and PSD was instructed to collect the corresponding prices from January 2024 onwards.

9. Compilation of House rent Index

9.1 The EG was apprised of the methodology for the compilation of the House Rent Index and was informed that the proposed methodology was placed in the public domain for comments. The comments received were placed before the Committee for information and deliberation.

9.2 Detailed discussions were held on the proposed approach for rent data collection. It was explained that the dwellings were distributed among the six months and the enumerator would visit each selected dwelling in the 1st month and 6 months after the previous visit to collect rent data. During these visits, investigators would ascertain the next expected date of rent revision, as most rents were being revised after 11 months and the tenants were generally aware of this information even if there were no formal rent agreements. In the intervening months, the investigator would visit the originally allotted dwellings, as well as any dwelling where a rent revision was expected, as reported by the household during the previous visit and flagged by the enumerator. This approach would ensure monthly data capture and would accurately reflect rent changes, and reduce the need for mandatory monthly visits by the enumerator.

9.3 After detailed deliberations, the Committee agreed to the proposed methodology for the compilation of the House Rent Index.

Decision: EG approved the proposed methodology for compilation of the House Rent Index and rent data collection.

10. Compilation of Petrol, Diesel, LPG, CNG and PNG.

10.1 EG was informed that in the present series, prices of petrol, diesel, LPG, PNG and CNG were being collected from selected fuel stations by the Field Operations Division (FOD) offices across the country. In order to strengthen and streamline the data collection mechanism, the Price Statistics Division (PSD) explored the possibility of obtaining fuel price data from administrative sources, namely oil marketing companies, at the national level.

10.2 EG was informed that Petroleum Planning and Analysis Cell (PPAC), Ministry of Petroleum and Natural Gas has agreed to provide fuel price data monthly. Data will be shared by PPAC on the 25th of each month with reference to prices prevailing on the 15th of the reference month. It was agreed that prices of one-litre unbranded petrol and diesel for all Retail Selling Points (RSPs) of Public Sector Undertakings (approximately 90,400 outlets) would be provided, separately for Urban and Rural sectors. Therefore, in CPI2024, index for petrol & diesel would be compiled on the basis of price data of around 90% fuel stations in the country.

10.3 It was also agreed during the meeting that price data for LPG, PNG and CNG would be shared in a similar manner for all available distributors across the country. Therefore, in CPI2024, index for LPG, CNG & PNG would be based on price data of almost all distributors.

10.4 The compilation methodology for fuel items (Petrol, diesel, LPG, CNG and PNG) would be same as adopted for other items in CPI2024 series.

Decision: The Expert Group appreciated the efforts made by the Ministry in obtaining fuel price data from administrative sources, particularly from the Petroleum Planning and Analysis Cell (PPAC), Ministry of Petroleum and Natural Gas. The Expert Group approved the inclusion of this administrative dataset in the revised CPI series and compilation of the same.

11. Compilation of Rail fare Index:

11.1 EG was apprised that The Ministry of Railways has submitted **distance slab-wise, train-wise and class/seat-wise passenger volume data** for the year **2023–24** to the Price Statistics Division (PSD). The data has been examined in detail and a methodology for compilation of the **CPI Rail Fare Index** has been developed. Based on the analysis of the submitted data, it was proposed to compile a **single all-India Rail Fare Index**, which should be used uniformly for all **States and sectors** for CPI compilation.

11.2 EG members were informed that the passenger volume data received from the Ministry of Railways has been utilized to derive **revenue-based weights** for different train types, classes and distance slabs.

Decision: The Expert Group agreed with the proposed approach and recommended that the methodology as proposed by PSD be adopted for compilation of the Rail Fare Index.

12. Compilation of Telecom Indices:

12.1 The Committee was informed that the Price Statistics Division (PSD) had held discussions with the Telecom Regulatory Authority of India (TRAI) on 14th November 2025 to understand the price-determining factors and to evolve an appropriate methodology for capturing price movements in the telecom sector. The proposed methodology was formulated based on the deliberations held during the meeting.

12.2 It was proposed to consider only the lowest-level prepaid and postpaid plans of the four major telecom operators, namely BSNL, Jio, Vi and Airtel for compilation of the Telephone item index. During the discussions, it was observed that most plans offered unlimited voice services and standardized SMS, with limited variation mainly in data volume. Further, tariffs were largely uniform across telecom circles, with minor variations mainly in Vi and BSNL. Accordingly, it was agreed that tariff and plan validity (in days) would be the key variables for capturing price changes.

12.3 In cases where a selected plan was discontinued, the next lowest available plan would be considered. Operator-wise indices would be compiled first and aggregated using subscriber-based weights (2023–24) as per the TRAI Annual Report.

Decision: After discussion, the Expert Group agreed with the proposed methodology. Selected slabs for pre-paid, post-paid and landline may be presented before the EG in its next meeting.

13. Draft trial index of 2025 based on proposed methodology

13.1 The Expert Group was apprised about the draft trial indices compiled based on the revised CPI structure, along with a comparative analysis vis-à-vis the current CPI series.

13.2 The Expert Group lauded the efforts of the Price Statistics Division (PSD) team in completing the exercise within the stipulated timelines. The committee also suggested incorporate the suggestions mentioned in this meeting immediately.

14. Level of Dissemination of results:

14.1 The proposal regarding the level of dissemination of CPI results in the new series was discussed.

14.2 EG members were informed that in the new series CPI indices at the item level for each State and sector, along with dissemination across all COICOP levels (Division, Group, Class, Subclass, and Item) for both State-wise and sector-wise breakdowns would be released.

Decision: Expert Group approved the proposed level of dissemination of results.

15. Draft template for the technical report of the Expert Group

15.1 The draft template for preparation of the Technical Report of the Expert Group was discussed. The date for the next EG meeting was decided to be 31^{sh} December.

Decision: The Expert Group expressed its satisfaction with the draft template and suggested that a section on highlighting the 'Changes/revisions' should be explicitly included in the report.

16. The summary of recommendations of the 12th EG meeting:

a) Gave go ahead with use of HCES 2023-24 for determining item basket and weights of CPI2024 series. In cases where expenditure data for 2023–24 were not available, HCES 2022–23 data should be used.
b) The first press release of the revised CPI series should include a concise summary note highlighting the new data sources used and the major methodological changes introduced in the CPI2024 series.
c) The Expert Group approved the proposed CPI 2024 structure as per COICOP 2018 as given in the agenda, with the correction of 'PAN' to 'PAAN', and agreed that other naming refinements may be examined independently, if required.

d) Approved the proposed weighing diagram structure according to COICOP 2018 classification.

e) The Expert Group discussed the issue of compilation of back series and was of the view that, to the extent possible, the same classification as adopted in the CPI2024 series should be used for the back series, separately for rural and urban sectors. However, more deliberations would be required for the preparation of back series.

f) EG approved the proposed methodology on treatment **of prices of items Sourced from E-commerce Platforms.**

g) The EG members emphasized that the revised CPI series should avoid conceptual controversy and should adhere to consistent international principles. Therefore, it was decided that free items, shall not be included in the CPI 2024 series.

h) The committee recommended development of "welfare adjusted CPI" which would require detailed and careful deliberations after the release of CPI 2024.

i) The Committee recommended adopting the methodology outlined under Case 2 of the agenda for implementation in the new CPI series for PDS items and further recommended including PDS items as weighted items in the CPI basket. The Committee also suggested that items should be considered for index compilation only where both the base price and corresponding weights were available. In cases where a positive price becomes zero in future due to free distribution, the price should be imputed based on relevant items of the category.

j) For imputation, the Committee suggested that if a price was missing in a particular PDS category (for example, BPL), it should be imputed using the month-on-month price movements observed in other available categories. If prices were missing across all categories, given the administrative nature of PDS item prices, the price should be carried forward from the previous month. The same imputation method should be implemented in the CPI 2024 for all the items supplied on administrative/ PSU/Department determined prices like, PDS, Electricity, Rail fare etc.

k) The electricity slabs for which electricity completely provided free of cost to domestic consumers should not be considered for CPI compilation and in future if any of the slabs become free, the same should be imputed based on the price movements of the other slabs within the State. Further, if all slabs become free, the price of the previous month should be carried forward as the imputed price. Since electricity has been provided at price determined by the DISCOMs on uniform basis for all consumers, imputation based on other items may not be appropriate.

l) Approved to introduce one additional slab—electricity consumption up to 400 units—for all DISCOMs across all States, and PSD was instructed to collect the corresponding prices from January 2024 onwards.

m) EG approved the proposed methodology for compilation of the House Rent Index and rent data collection.

n) The Expert Group appreciated the efforts made by the Ministry in obtaining fuel price data from administrative sources, particularly from the Petroleum Planning and Analysis Cell (PPAC), Ministry of Petroleum and Natural Gas and approved the inclusion of this administrative dataset in the revised CPI series and compilation of the same.

o) The Expert Group agreed with the proposed approach and recommended that the methodology as proposed by PSD be adopted for compilation of the Rail Fare Index.

p) EG agreed with the proposed methodology, selected slabs for pre-paid, post-paid mobile and landline telecom connections and suggested that result of the compilation may be presented before the EG in its next meeting.

q) The Expert Group lauded the efforts of the Price Statistics Division (PSD) team in completing the exercise within the stipulated timelines. The committee also advised that all the recommendations of the EG may be incorporated for compilation of CPI 2024 series immediately.

r) Expert Group approved the proposed level of dissemination of results.

s) The Expert Group expressed its satisfaction with the draft template and suggested that a section on highlighting the 'Changes/revisions' should be explicitly included in the report.

17. The meeting ended with a vote of thanks to the chair.

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI - **Chairperson**
2. Mr. Sanjay, ADG, PSD, NSO, MoSPI
3. Shri Anujit Mitra, Adviser, RBI
4. Ms. Anupam Prakash, Adviser, RBI
5. Dr. Himanshu, Professor, CESP, SSS, JNU
6. Prof. Sanket Mohapdhyay, IIM , Ahmedabad
7. Dr. Prachi Mishra, Professor, Department of Economics, Director and Head, Ashoka Isaac Center for Public Policy, Ashoka University
8. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI – Member Secretary

Other Participants:

1. Mr. N.K. Santoshi, DG(CS), MoSPI
2. Mr. Anil Kumar Sharma, DDG, Labour Bureau, Ministry of Labour and Employment
3. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
4. Mr. Ram Sajeevan, Director, PSD, NSO, MoSPI
5. Mr. Sanjeev Kumar, DS, MoSPI
6. Mr. Sarthak Gulati, AGM, MPD, RBI
7. Mr. Saquib Hasan, Assistant Advisor, RBI
8. Mr. Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
9. Mr. Prasu Jain, Assistant Director, PSD, NSO, MoSPI
10. Ms. Poonam Singh Chauhan, Assistant Director, PSD, NSO, MoSPI
11. Mr. Jitender Kumar, Sr. Statistical Officer, PSD, NSO, MoSPI
12. Mr. Ms. Nivedita Sr. Statistical Officer, PSD, NSO, MoSPI
13. Ms. Smita Rawat, Sr. Statistical Officer, PSD, NSO, MoSPI
14. Mr. Kaushalendra Kumar Mishra, Jr. Statistical Officer, PSD, NSO, MoSPI
15. Mr. Anil Kumar, Jr. Statistical Officer, PSD, NSO, MoSPI

S-11015/4/2022-PSD-Part(4)
Government of India
Ministry of Statistics and Programme Implementation
National Statistics Office
Price Statistics Division

Khurshid Lal Bhawan, New Delhi
Date: 19/01/2026

Subject: Minutes of the thirteenth meeting of Expert Group (EG) for Base Revision of Consumer Price Index

The thirteenth meeting of the Expert Group for Base Revision of Consumer Price Index (CPI) was held under the Chairmanship of Shri Ashish Kumar, Former Director, UNSIAP and Ex-Director General (CSO) on 31st December, 2025 in Room no. 201, 2nd floor, Khurshid Lal Bhawan, Janpath, New Delhi. The list of participants is given at **Annexure-I**. Secretary, MoSPI also joined the meeting for a while.

2. At the outset, the Chairperson welcomed the participants and briefed the EG members about the following agenda points to be discussed in the meeting:

I. Action taken report on the decisions taken during 12th EG meeting

II. Methodology for index of telephone charges

III. Methodology for index of electricity

IV. Methodology for index of Postage, Courier, fax and money order charges

V. Methodology for index of Online media service provider/streaming services

VI. Inclusion of Metro charges in the item Rail fare

VII. PDS Items

3. Action Taken Report on the decisions taken during twelfth EG meeting:

3.1 EG was apprised that necessary action has been taken on all the recommendations given by Expert Group in its 12th EG Meeting.

4.1. The Expert Group discussed the issue of non-inclusion of free PDS items in the new series of CPI. It was noted that the comments received on the Discussion Paper were largely not in favour of including free items within the CPI framework. The Chairperson observed that practical difficulties would arise in dealing with situations where zero prices subsequently become positive. It was further noted that if HCES were conducted more frequently and base year revisions could be undertaken more frequently, at least every five years. Any changes in PDS item prices would be appropriately captured through revised weights. By adopting this approach, the principles of CPI compilation would remain consistent with the existing methodology.

4.2. The Secretary, MoSPI, stated that if free PDS items are to be considered, a separate index- Welfare Adjusted Index, may be developed by PSD. The Expert Group, however, observed that in a Welfare Adjusted Index, not only free PDS items but all items provided free of cost, such as health and education, should also be included. It was decided that deliberations on the proposed Welfare Adjusted Index may be taken up separately after the launch of the new CPI series. Secretary(MoSPI) requested the EG to deliberate on the issue and provide necessary guidance to PSD after the release of CPI 2024.

4.3. The Secretary, MoSPI, observed that stakeholders and the general public would seek clear explanations for the changes being introduced, particularly in view of changes in data sources, weights, and methodology. Accordingly, it was directed that in the EG report, the key changes in methodology and data sources may be highlighted separately. It was further directed the EG report may be released prior to the forthcoming pre-consultative workshop, to enable stakeholders who did not participate in earlier discussions to better understand the changes and provide informed feedback.

4.4. The PSD team informed that during the IMF CPI Mission held during 11–14 August 2025, the IMF expert, Dr. Brian Graf, had stated that the term base year is not used internationally. The years that are referred to are price reference year, weight reference year and index reference year. Mr Graf also mentioned that the exercise presently referred to as base revision is, actually, a base updation. The Expert Group deliberated on the issue of naming and terminology for the upcoming CPI revision. It was noted that the term "base revision" supported continuity of the long time series and avoided the perception of a completely new or disconnected series, and that the term has been also used in the context of revision of other indices. However, in view of the significant changes in data sources and methodology, and considering international practice where such exercises are referred to as "updation", the term base revision alone may understate the scope of the exercise. Accordingly, it was suggested that an appropriate terminology reflecting both continuity and the comprehensive nature of changes may be adopted, such as **"Comprehensive updation of CPI including base revision"**.

5. Methodology for index of telephone charges

5.1 The Expert Group was informed that data for "Telephone charges: mobile" will be compiled based on mobile plan prices of major operators, namely Airtel, BSNL, Jio and VI, by considering three prepaid plans and two postpaid plans. Prices will be collected centrally, Thereafter, operator-wise indices shall be compiled using the regular method by taking the product of the geometric mean of price relatives with the corresponding index of the previous month. The Index shall then be obtained as a weighted average of the operator-wise indices, with weights based on subscriber numbers for the year 2024, as reported in the Report of TRAI, which provides Licensed Service Area (LSA)-wise subscriber figures. The same weights shall be applied to all States falling within a given LSA. Wherever tariffs are available at the State level, such tariffs shall be used for index compilation; otherwise, LSA-level tariffs shall be adopted. Further, the same index would be used for both urban and rural areas within a State, as separate information was not available.

5.2 The PSD team mentioned that plan prices would be converted into per-day prices; accordingly, changes in plan duration (for example, from 28 days to 30 days) would not be treated as specification changes. It was also discussed that technological transitions such as from 4G to 5G, where earlier plans are discontinued and users are required to migrate, would be handled by shifting to the available plan rather than by applying quality adjustment. One member suggested the use of hedonic regression for quality adjustment in such cases. The Expert Group observed that hedonic quality adjustment is complex and would require a detailed study, and that PSD may examine this separately for the next base revision, but not in the current exercise. In a similar manner, index compilation for item "Telephone charges: landline" are also proposed to be considered.

5.3 Regarding missing prices, it was decided that these would be imputed using the available observations within telephone charges. It was further informed that, in cases where all prices related to telephones were missing, the previous month's prices would be carried forward for compilation of the Telephone Index, as was done in the case of administered price items since such a situation may occur very rarely.

Decision: The proposed methodology for compilation of the "Telephone charges: mobile" and "Telephone charges: landline" Indices was approved after detailed deliberations. The Expert Group suggested that, instead of compiling a single All-India index, State-specific indices should be compiled and applied uniformly across both Urban and Rural sectors. Further, the missing prices should be imputed using price changes observed in the available *telephone charges*–related items, as followed for other items. However, in cases where all such prices are missing, the Expert Group recommended carrying forward the previous month's prices, in line with the practice adopted for administered price items. The Committee also took note of the detailed specifications for price collection and recommended its adoption.

6. Methodology for index of electricity

6.1. The PSD team presented the revised methodology for compilation of the Electricity Index, following its decision in the previous meeting not to consider free items. The proposed methodology involves computing price relatives for each DISCOM and consumption bracket (total domestic charges for consumption of 100, 200, 300 and 400 units of electricity), followed by aggregation using a weighted average based on the number of domestic consumers in each slab. A concern was raised regarding consistency with the CPI practice of using the geometric mean at the elementary level. The PSD team clarified that the elementary index is first compiled separately for each DISCOM and consumption bracket, and that the weighted arithmetic mean is applied only at the aggregation stage. The Expert Group agreed with the proposed methodology.

6.2. A concern was raised regarding peak-hour pricing under smart meters being installed across States, as higher tariffs during peak hours could affect the total electricity bill. The PSD team clarified that specifying peak and non-peak hours as part of the price specification would address this issue. The Expert Group agreed with this approach.

6.3. In cases of missing prices, it was proposed to impute prices using the changes observed in the available DISCOMs and consumption slabs. Where all prices were missing, the previous month's prices would be carried forward, since electricity is priced as administered price item.

Decision: The Expert Group agreed to the proposed methodology and advised that prices be imputed using changes observed at the next level of aggregation with in electricity. In cases where prices for all slabs and DISCOMs are missing or the item becomes free, the previous month's prices should be carried forward, as electricity is an administered priced item.

7. Methodology for index of Postage, Courier, fax and money order charges

7.1. PSD team mentioned that the weighted item "Postage, couriers, fax and money order" comprises four priced items namely Money Order, Postage Charges (Domestic), Postage Charges (International), and Courier Charges (other than India Post). The Committee was informed that for Money Order, Postage Charges (Domestic), and Postage Charges (International), a single All-India index is proposed to be compiled using the tariff rates charged by the India Post Department, considering the prices of these services are administered and a uniform tariff structure was applicable across the country. For Courier Charges (other than India Post), the Committee noted that prices would be collected from the market and used for index compilation.

7.2 The Committee further informed that in the absence of separate expenditure or revenue data, the proposal is to assign equal weights to each of the four priced items within the Postal Services group. Item-wise indices would be compiled following the standard CPI methodology by calculating price relatives with respect to the previous month and applying these relatives to the corresponding previous month indices.

7.3 Regarding missing prices, the Committee agreed that appropriate imputation would be carried out using price movements observed in the available prices for the respective items. It was also noted that, in rare cases where prices for all three India Post–related items were unavailable in a given month, the previous month's prices would be carried forward, consistent with the treatment followed for administered price items. The Committee also took note that the detailed specifications for price collection for the three India Post–related items would be presented separately.

Decision: After detailed deliberations, the Committee approved the proposed methodology for compilation of the index for "*Postage, couriers, fax and money order*" and also the specifications proposed for price collection.

8. Methodology for index of Online media service provider/streaming services

8.1. For Online Media Service Provider / Streaming Services, PSD team proposed to create a single All-India index and apply the same uniformly across States and sectors,

given largely uniform subscription rates. Prices would be collected online from major OTT platforms, treating each platform as a separate specification and compiling the index using the geometric mean, with standard imputation for missing prices. Accordingly, it was proposed to collect prices from the following major OTT service providers: (i) Amazon Prime Video, (ii) Netflix, (iii) Jio Hotstar, (iv) ZEE5, and (v) SonyLIV. For each OTT platform, two price quotations would be collected corresponding to the base subscription plans with a validity of one month. In cases where a one-month plan was not available, the next available subscription plan would be selected for price collection.

8.2 The Committee also apprised that, in cases where price quotations were missing for any item, appropriate imputation would be carried out using the price movements observed in the available prices for that item. Further, if all the prices were unavailable in a given month, the previous month's prices would be carried forward, in line with the treatment followed for administered priced items, as such situations wouldarise only in rare circumstances.

Decision: The Expert Group agreed with the methodology and the selection of OTT service providers. However, in view of the popularity and widespread usage of "YouTube Premium", EG recommended to include it along-with other service providers.

9. Inclusion of Metro charges in the item Rail fare

9.1. The PSD team presented the methodology for inclusion of Metro fares under the weighted item Rail fare. It was noted that separate expenditure data for Metro services were not available and that Metro lines were limited or nascent in most States, Metro farewould be considered only for Delhi. It was stated that equal weights would be assigned to Rail fare and Metro fares within the weighted item "Rail fare" in Delhi.

Decision: The Committee took note of the absence of separate expenditure data for Metro services, the limited availability of Metro rail facilities across States, and the relatively nascent stage of Metro operations in most States, except Delhi. In view of this, the

Committee agreed with the proposal to consider Metro fares as a priced item only for the State of Delhi, along with the proposed distance-wise specifications for price collection.

10. PDS Items

10.1. The Expert Group recalled its earlier recommendation to exclude free social transfers and its approval of the methodology for compilation of PDS item indices. It was noted that the earlier methodology applied category-wise weights based on quantities consumed from HCES 2023–24 for aggregation at the State and sector levels. PSD team proposed to use category-wise shares of expenditure as captured in HCES 2023–24, in place of quantity-based weights. The Expert Group agreed to the revised approach.

Decision: After detailed deliberation EG agreed to the proposal of using the share of expenditure based on HCES 2023-24 instead of the share of the quantity consumed between the PDS categories.

11. Back Series

EG mentioned that the CPI users will expect some form of linking factor to the old series at the time of the first CPI release. It was noted that in view of the substantial changes in data sources, item coverage and methodology, construction of a detailed back series may need more deliberations and time too. The Expert Group recognized that the immediate priority should be for finalizing, compiling and releasing the new CPI series along with linking factors at the All-India rural, urban and combined levels only. Issues relating to construction of a back series for other levels may be examined separately after the release of the new series.

12. The Summary of recommendations of 13th meeting of EG are as following:

i. Base revision to be called and written as "Comprehensive updation of CPI including base revision".

ii. Approved the proposed methodology for compiling index of Telephone charges by collecting prices centrally through online sources.

iii. PSD may conduct study on hedonic regression for quality adjustments for the next base revision.

iv. Approved the proposed methodology for compiling index for Electricity.

v. Approved the proposed methodology for compiling index of Postage, Courier, fax and money order charges by generating single index at all India level using administrative data sources.

vi. Approved the proposed methodology for compiling index of Online media service provider/streaming services by generating single index at all India level using online data sources. Suggested to add You tube premium also as specification for price collection under this item.

vii. EG also agreed on the inclusion of Metro charges as priced item under the weighted item Rail fare for Delhi only with equal weight between the priced items Rail fare and Metro charges.

viii. EG approved the proposal to use category-wise shares of expenditure as captured in HCES 2023–24, in place of quantity-based weights for PDS items index calculations.

ix. The Expert Group recommended that linking factors should be generated and released at the All-India Rural, Urban, and Combined levels along with the launch of the CPI 2024 series, enabling users to undertake meaningful comparative analysis.

13. The meeting ended with the vote of thanks to the chair.

Annexure-I

List of Participants

Members of Expert Group for Base Revision of CPI:

1. Mr. Ashish Kumar, Former Director, UNISAP, Former DG(CSO), MoSPI
2. Mr. Sanjay, ADG, PSD, NSO, MoSPI
3. Dr. Prachi Mishra, Professor, Department of Economics, Director and Head, Ashoka Isaac Center for Public Policy, Ashoka University.
4. Ms. Deepti Srivastava, DDG, PSD, NSO, MoSPI
5. Shri Anujit Mitra, Adviser in Charge, DSIM, RBI
6. Sh. Dilip Kumar Sinha, DDG (DPIIT)

Other Participants:

10. Shri N.K. Santoshi, Director General (Central Statistics), MoSPI
11. Shri Sanjib Bordoloi, Director, MPD, RBI
12. Mr. Jose Kurian, Director, PSD, NSO, MoSPI
13. Mr. Ram Sajeevan, Director, PSD, NSO, MoSPI
14. Mr. Sanjeev Kumar, Deputy Secretary, PSD, NSO, MoSPI
15. Mr. Renjith Mohan, Assistant General Manager, MPD, RBI
16. Ms. Sritama Ray, Assistant General Manager, MPD, RBI
17. Ms. Anjali Yadav, Deputy Director, PSD, NSO, MoSPI
18. Mr. Sourav Sablania, Deputy Director, PSD, NSO, MoSPI
19. Mr. Prasu Jain, Deputy Director, PSD, NSO, MoSPI
20. Ms. Poonam Singh Chauhan, Deputy Director, PSD, NSO, MoSPI
21. Ms. Nivedita, Senior Statistical Officer, PSD, NSO, MoSPI

22. Ms. Reva Vijay Rathan, Senior Statistical Officer, PSD, NSO, MoSPI
23. Mr. Jitender Kumar, Senior Statistical Officer, PSD, NSO, MoSPI
24. Mr. Kaushalendra Kumar Mishra, Jr. Statistical Officer, PSD, NSO, MoSPI